FERNALD CLEANUP PROGRESS BRIEFING
OCTOBER 2000

6:30 p.m.	Opening Remarks	Gary Stegner
6:35 p.m.	FCAB Update	Jim Bierer
6:40 p.m.	Introduction	Nina Akgunduz
6:45 p.m.	Silo 3	Karen Wintz Charlie Wolf, Rocky Mountain Remediation Services Project Manager
7:15 p.m.	AWR	Bob Fellman John Lawson, Foster Wheeler Engineering Manager
7:45 p.m.	Environmental Monitoring	Doug Daniels

Question and Answer Session

8:30 p.m. Adjourn

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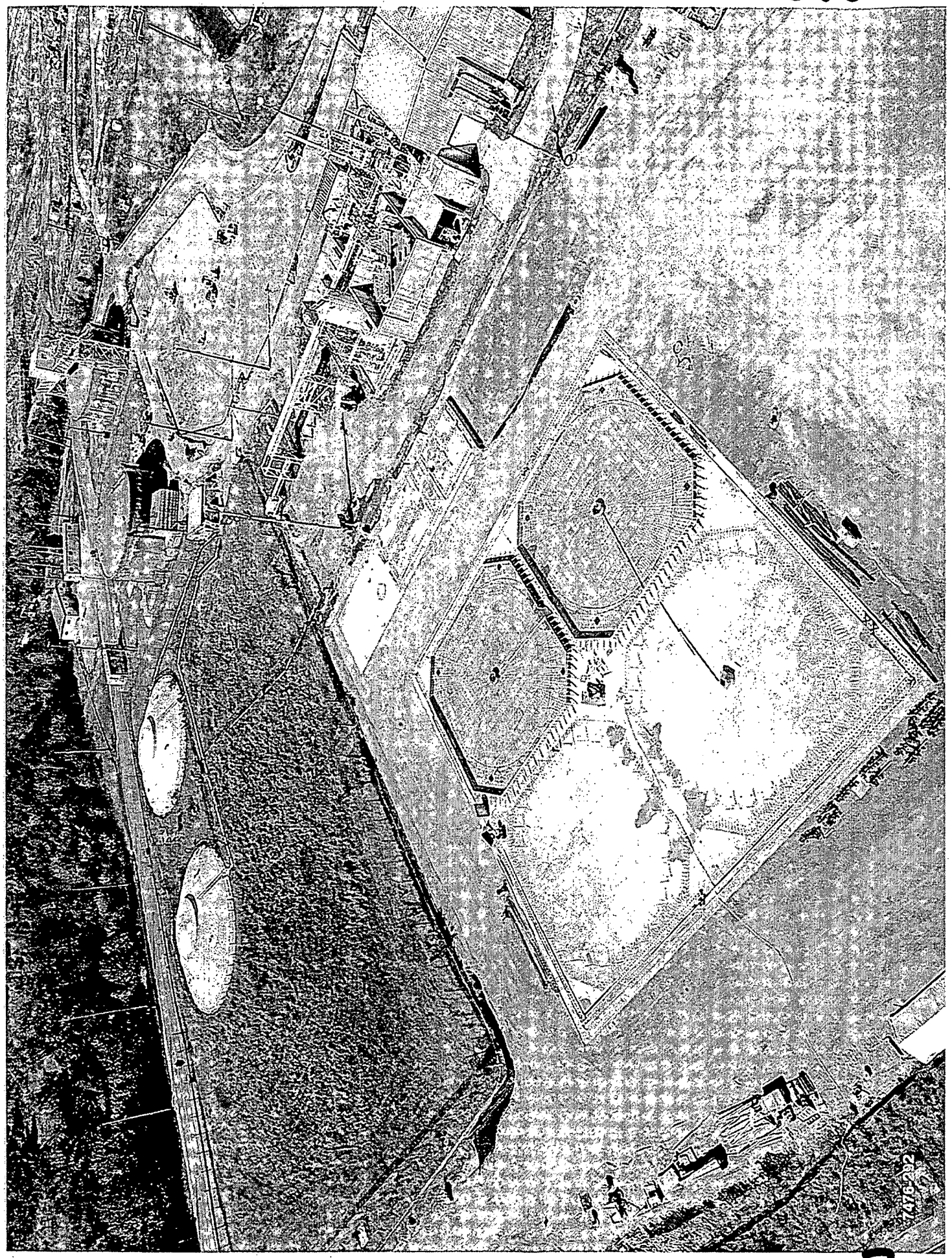

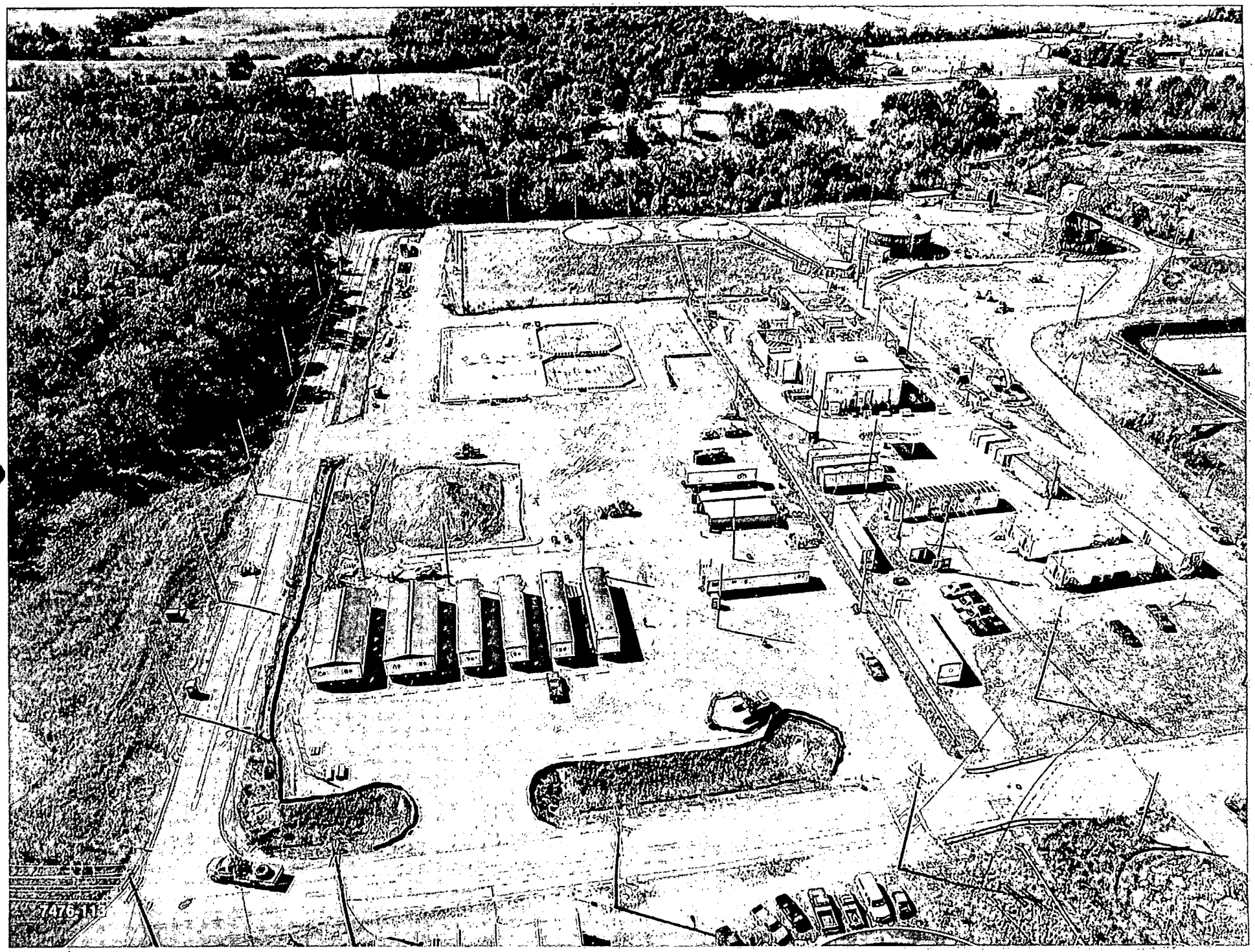

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SILOS PROJECT
SILO 3
Project Objective

- Safely retrieve, chemically stabilize/solidify and dispose of approximately 5,100 cubic yards of material

- Awarded Stabilization Contract to Rocky Mountain Remediation Services (RMRS), December 1998

SILOS PROJECT
SILO 3

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- RMRS' Scope:
  - Retrieve, treat and package material prior to shipment for off-site disposal
  - Design, construct, test, operate, maintain, shutdown and dismantle retrieval and treatment facilities
  - Gross decontamination of interior

SILOS PROJECT
SILO 3

- Fluor Fernald's Scope:
  - Manage RMRS contract
  - Provide operations labor
  - Ship treated material to disposal facility

SILOS PROJECT
SILO 3
Project Status

- EPA approval of Site Preparation Package, May 2000
- Fluor Fernald issued authorization to mobilize to RMRS, end of May
- Remedial Design Package submitted to EPA's, May 2000
  - Conditionally approved by USEPA, end of September

SILOS PROJECT
SILO 3
Critical Analysis Team (CAT) Review

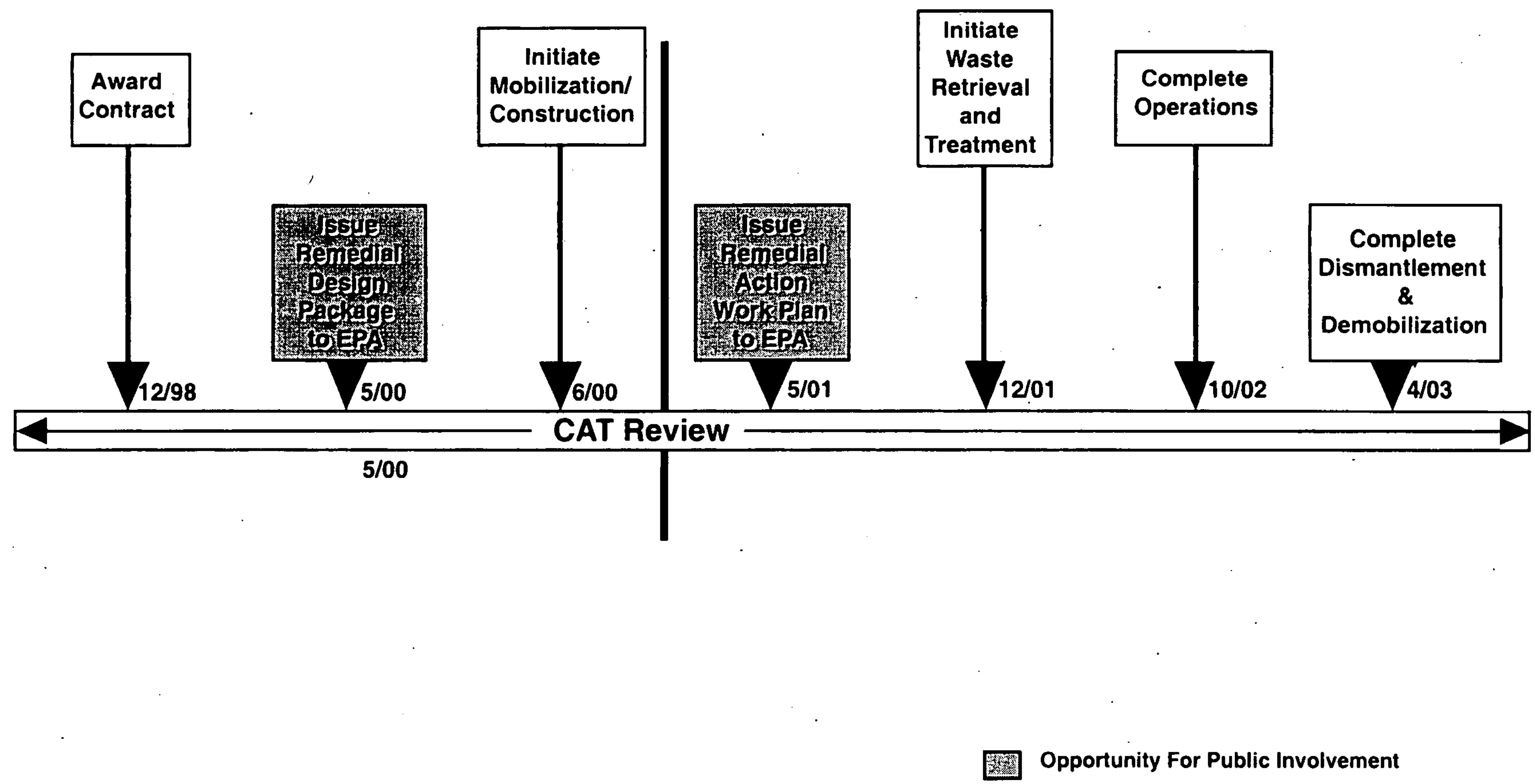
- Technical Baseline
  - Process flow diagrams
  - Piping and instrumentation diagrams
  - General arrangement drawings
  - Heat and material balance

Graphics # 6627.2F 10/00

SILOS PROJECT
SILO 3
Critical Analysis Team (CAT) Review (cont')

- Remedial Design
  - Retrieval technology description
  - Process description
  - Process Control Plan
  - Sampling and Analysis Plan
  - Operational Environmental Control Plan

SILO 3 PROJECT



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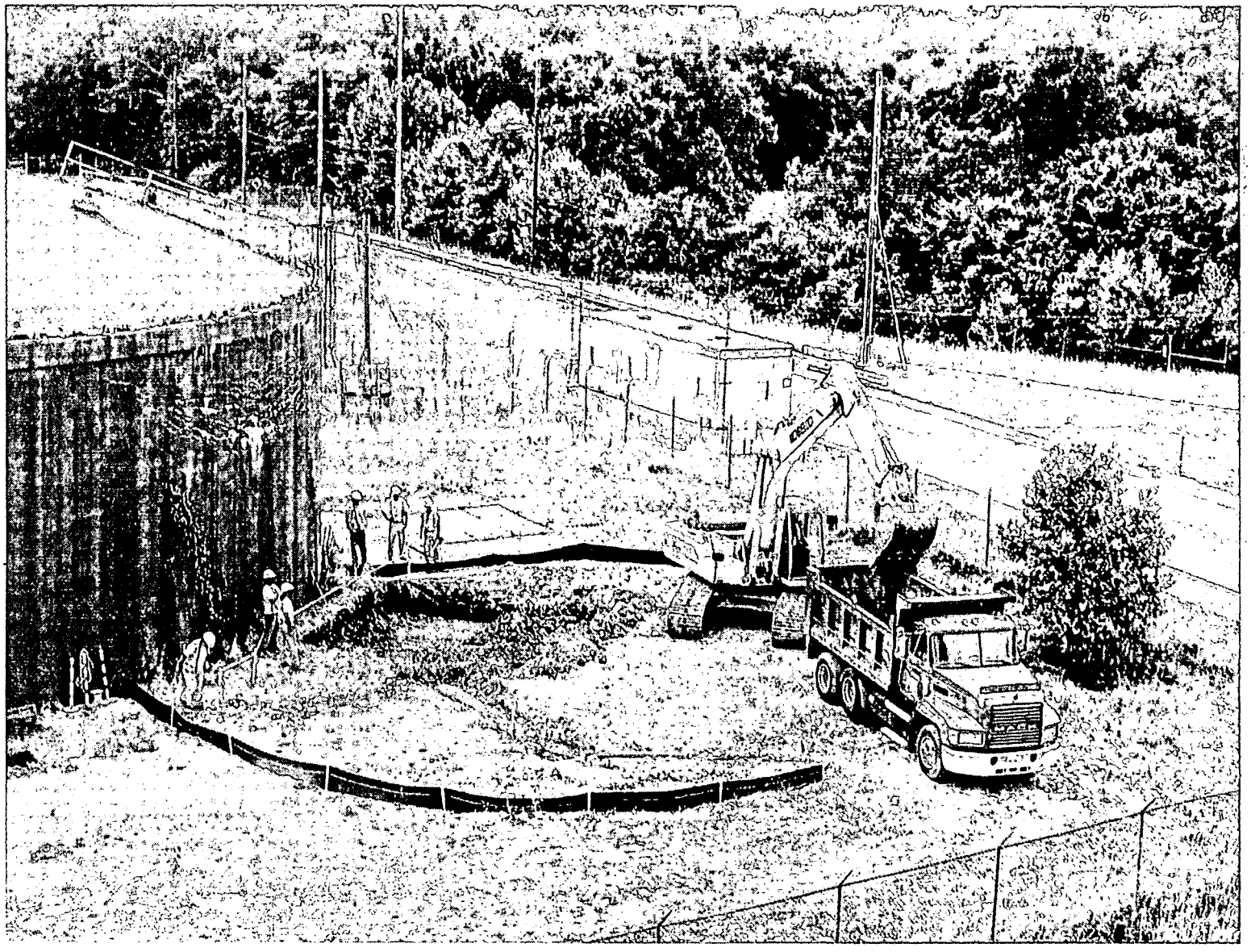
GANTRY EXCAVATION



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GANTRY FOUNDATION CONCRETE POUR

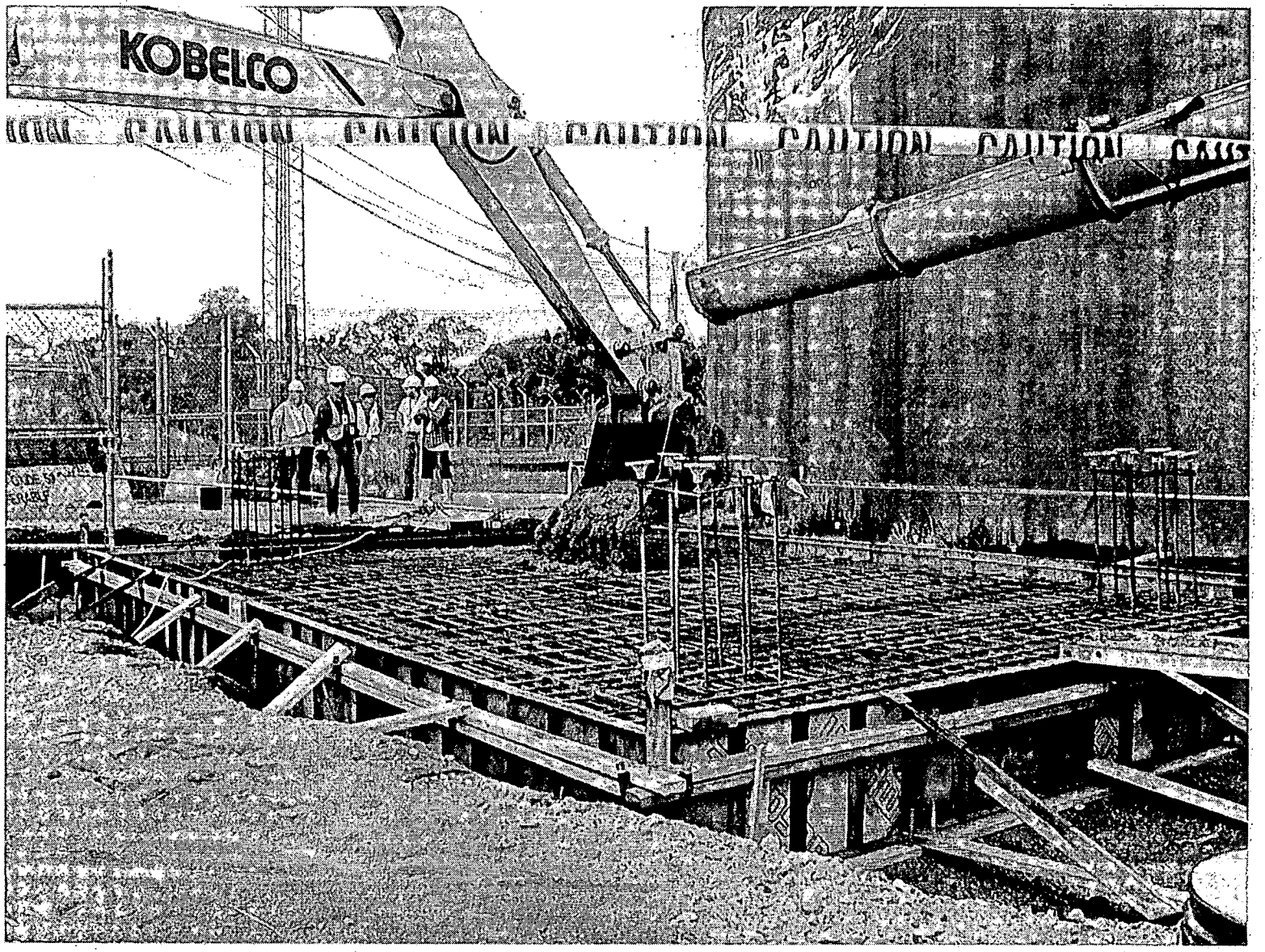

Photo taken August 2000

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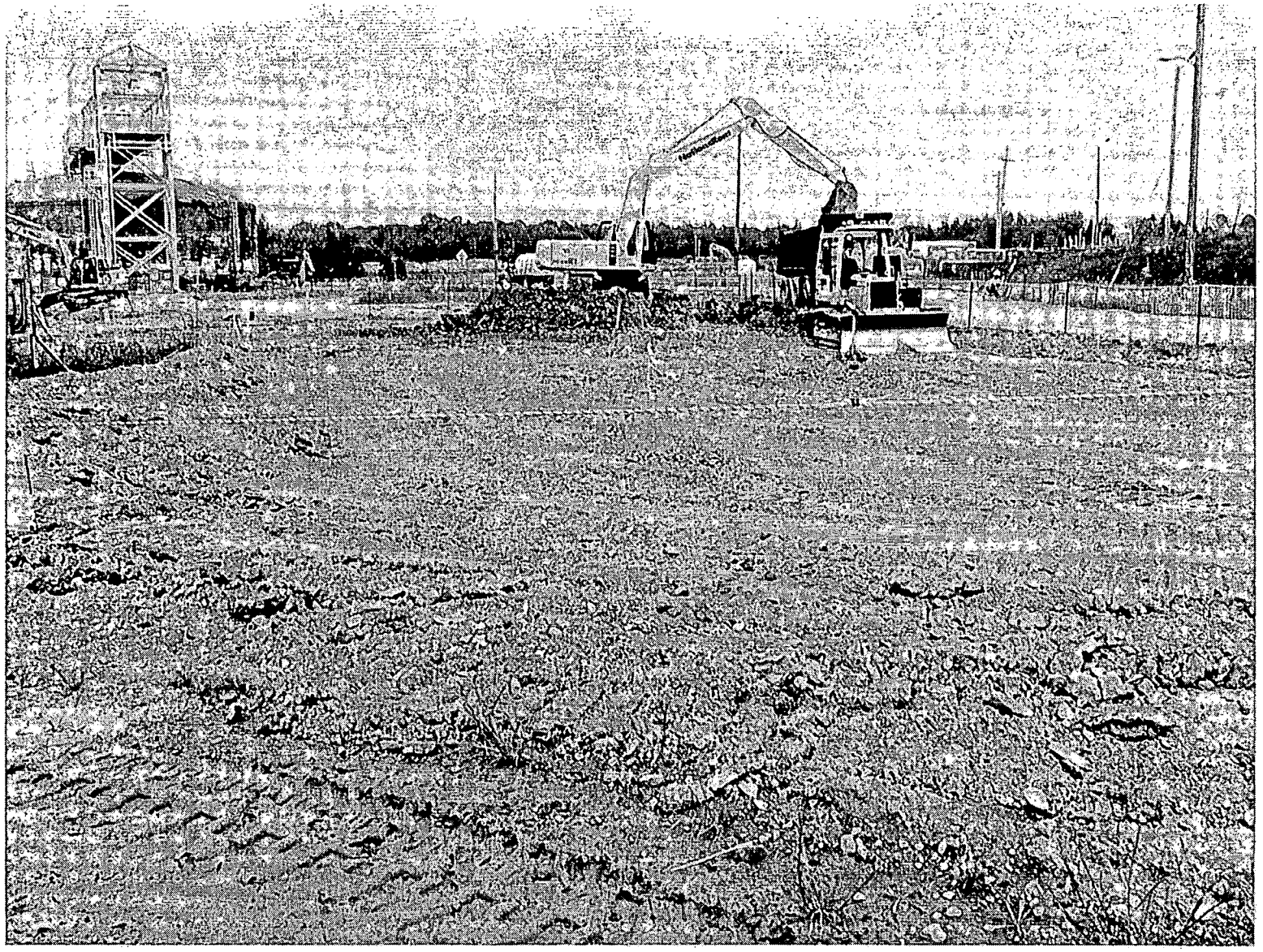
SILO 3 COMPLETED GANTRY FOUNDATION

Photo taken August 2000

Graphics # 6627.2J 10/00 Photo # 7325-D131

ISA PAD GRADING



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ISA STORMWATER DRAINAGE

Photo taken August 2000

Graphics # 6627.2L 10/00 Photo # 7325-D122

ISA PREPARATION

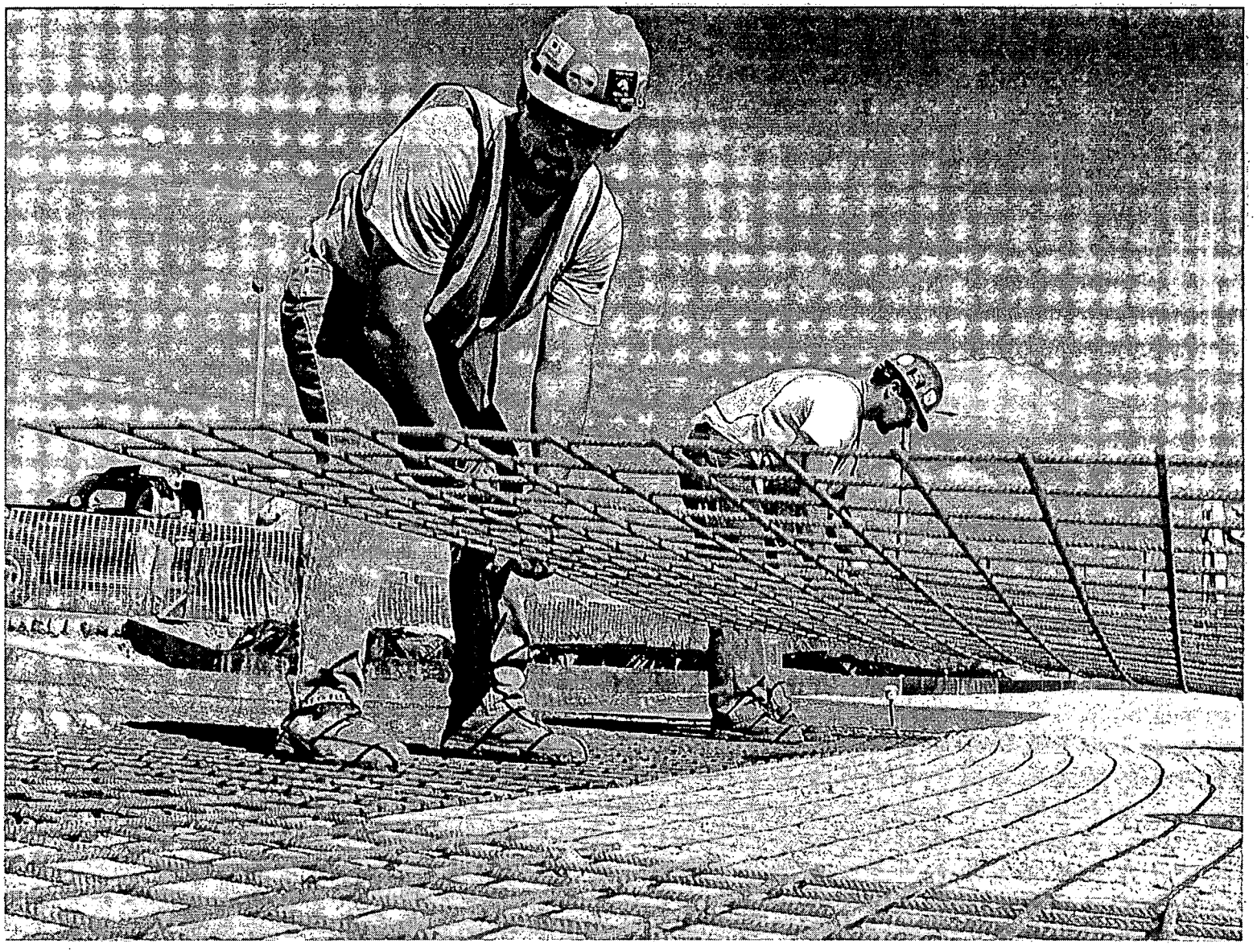

Photo taken October 2000

Graphics # 6627.2M 10/00 Photo # 7325-D204

ISA CONCRETE POUR

Photo taken October 2000

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LASER SCREED OPERATIONS

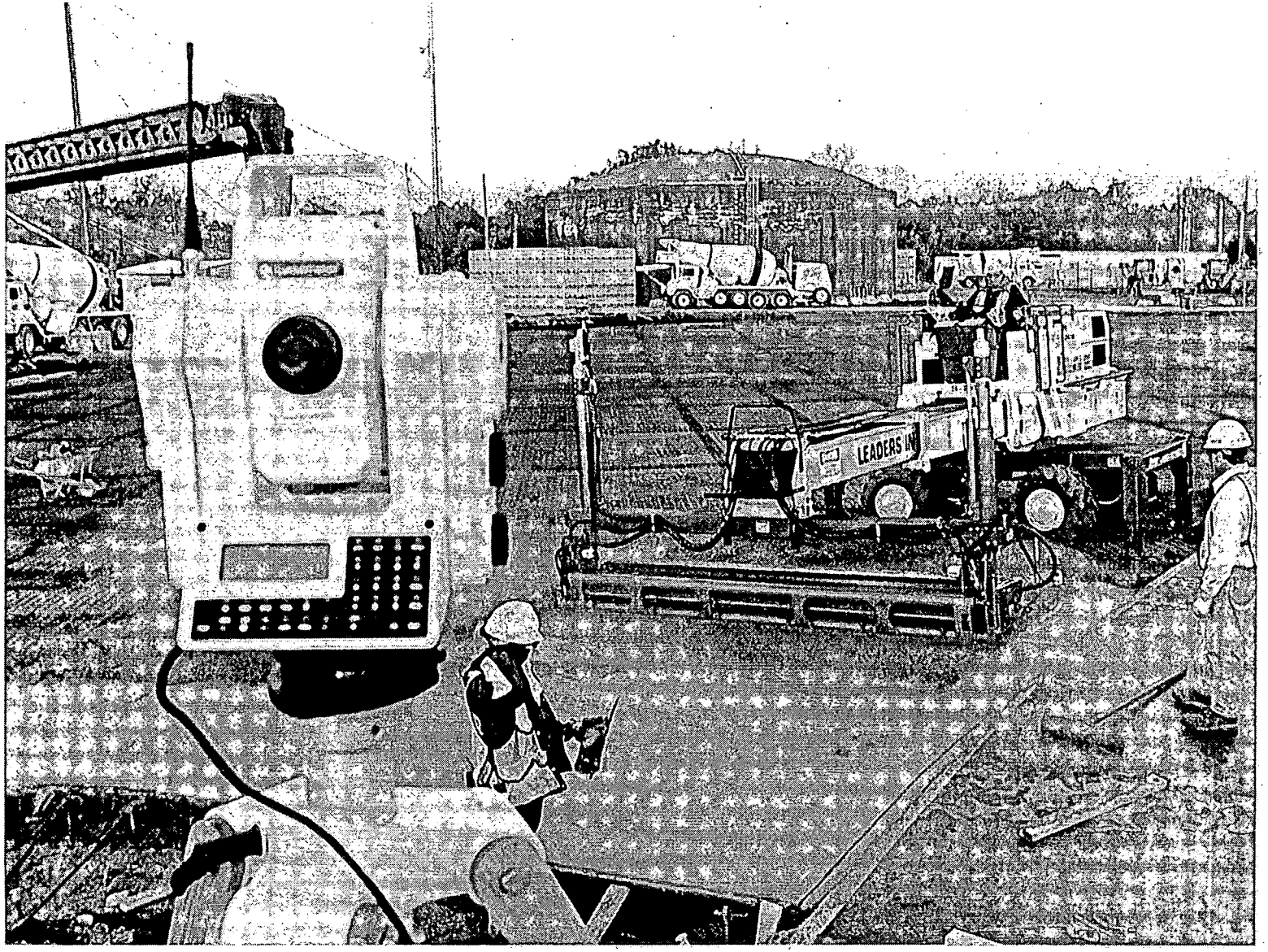

Photo taken October 2000

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TELEBELT OPERATIONS

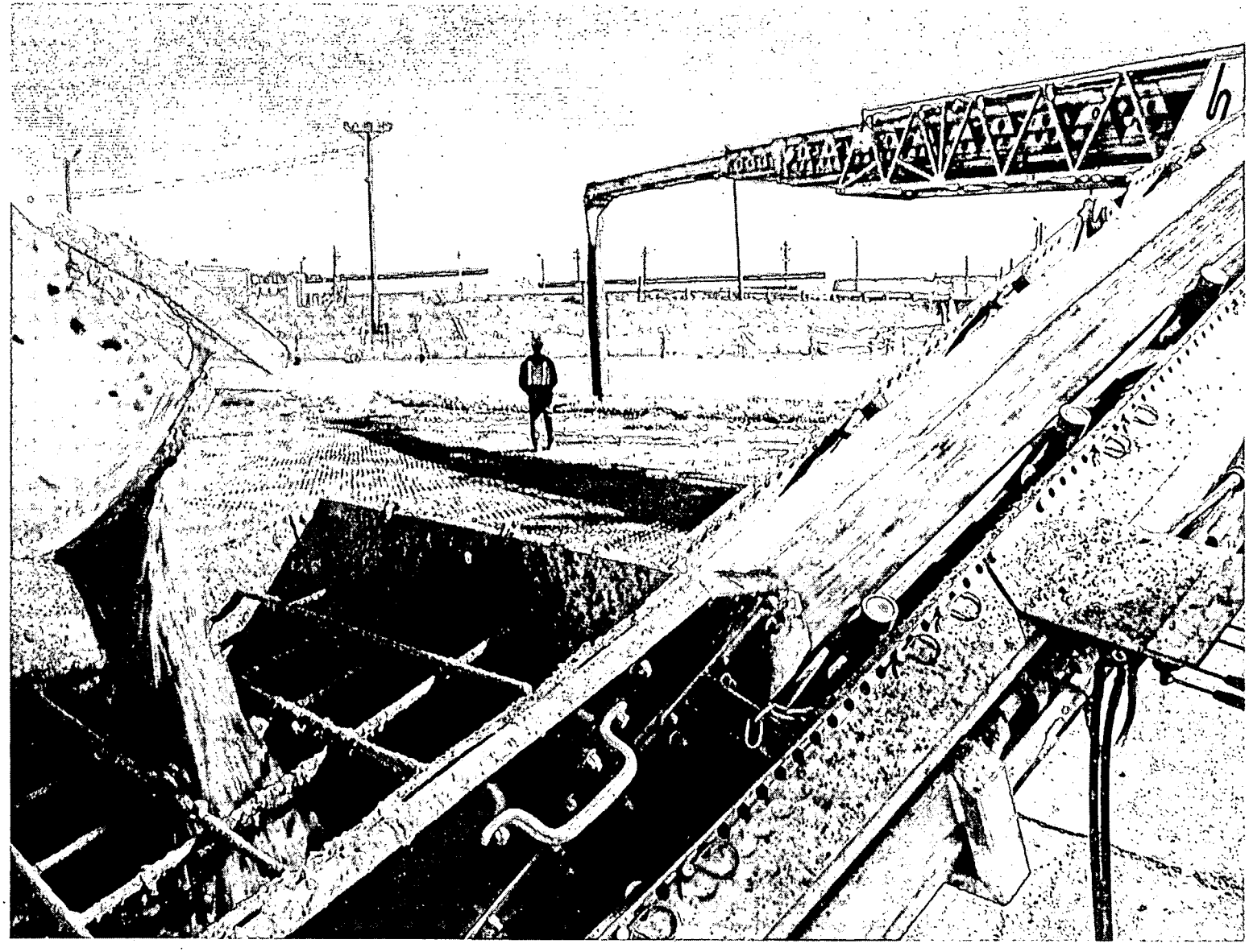

Photo taken October 2000

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LASER SCREED OPERATIONS

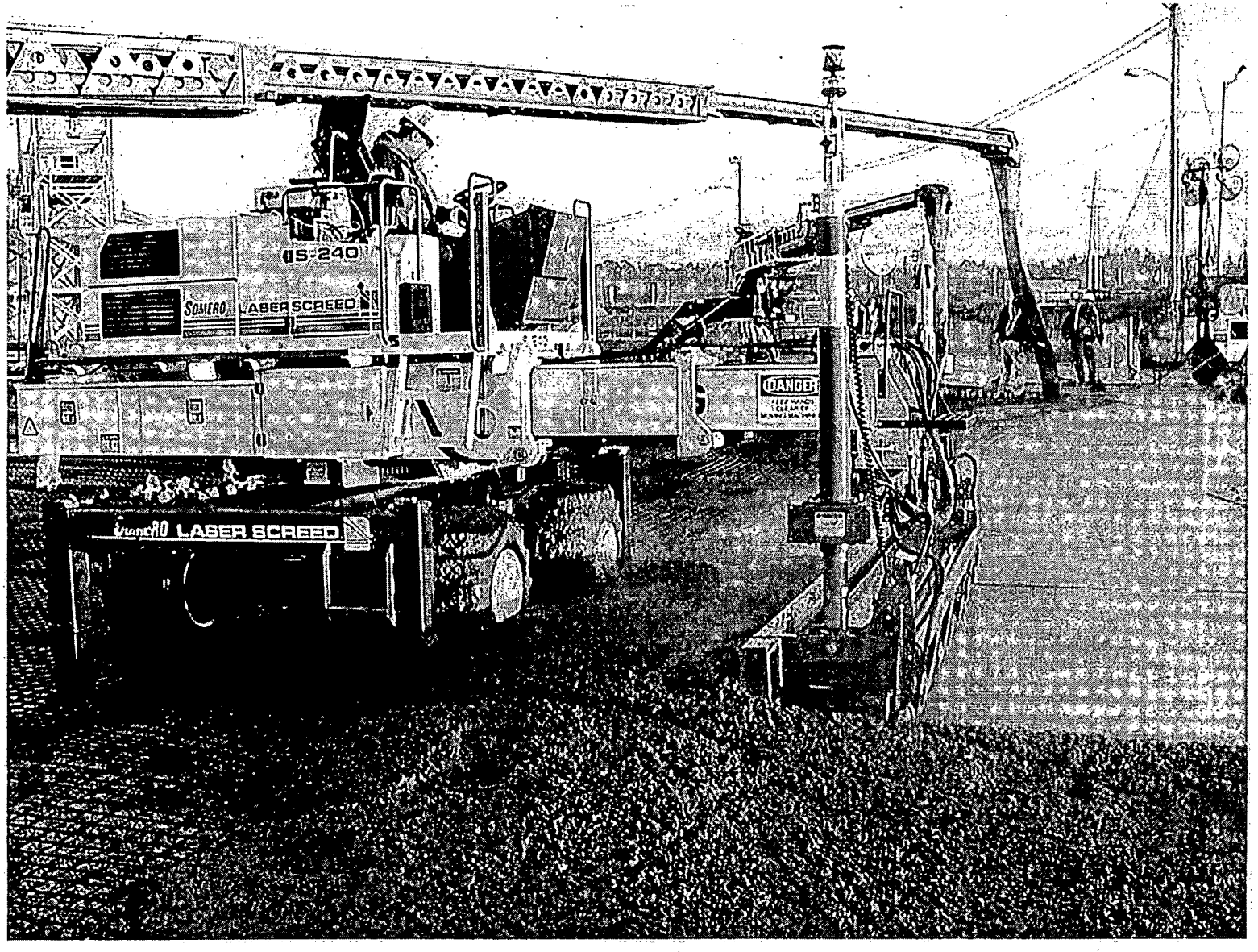

Photo taken October 2000

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INTERIM STORAGE AREA

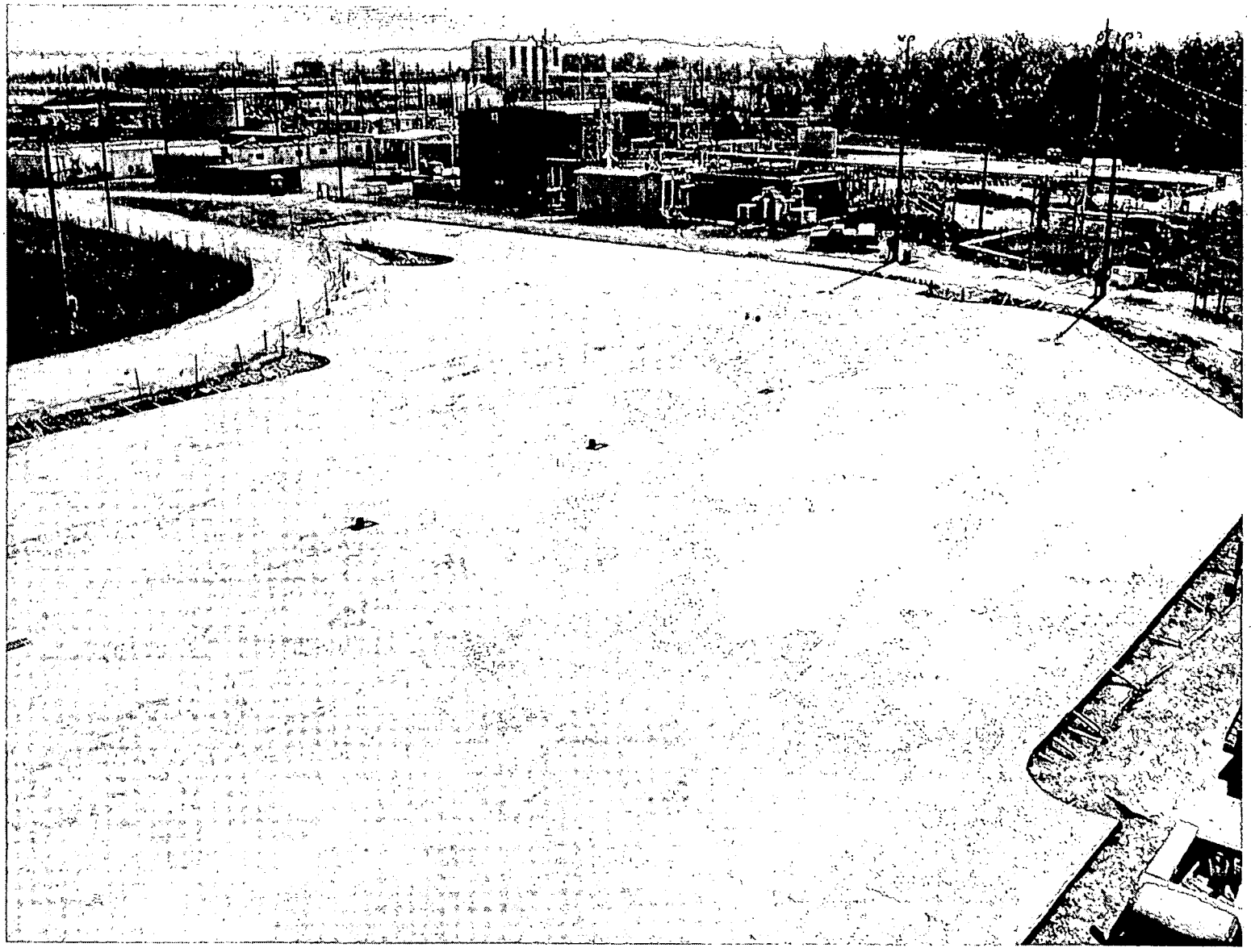

Photo taken October 2000

Graphics # 6627.2R 10/00 Photo # 7325-D291

SILOS PROJECT
SILOS 1 & 2
ACCELERATED WASTE RETRIEVAL (AWR) PROJECT

Project Objective

- Transfer approximately 9,000 cubic yards of waste materials - residue, water, discrete objects, heels and Bentogrout™ to four 750,000-gallon storage tanks

- Assure retrieval of stored waste materials from the Transfer Tank Area to the Future Full Scale Remediation Facility

Graphics # 6627.1A 10/00

SILOS PROJECT
SILOS 1 & 2
AWR PROJECT

- AWR Contract FSC-624 awarded to Foster Wheeler Environmental Corporation (FWENC), February 1999

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- FWENC Scope:
  - Design, construct, test, operate, maintain and turnover to Fluor Fernald Facilities
  - Silos Waste Retrieval System

SILOS PROJECT
SILOS 1 & 2
AWR PROJECT

- FWENC Scope continued:
  - Decant Sump Waste Retrieval System
  - Transfer Tank Waste Retrieval System
  - Radon control System (Phase 1 and 2)
  - Full-Scale Mock-up System

SILOS PROJECT
SILOS 1 & 2
AWR PROJECT

- Fluor Fernald Scope:
  - Operations/maintenance, supervision and labor
  - Radiological program implementation
  - Oversight of all construction and transfer operations

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SILOS PROJECT
SILOS 1 & 2
AWR PROJECT
Project Accomplishments

- Received EPA approval on Site Preparation Package, May 2000
- Initiated construction, June 2000
  - Transfer Tank Area Foundation
  - Radon Control System Foundation
  - Administrative Trailer Complex
- Submitted Remedial Design Package to EPA's, June 2000

SILOS PROJECT
SILOS 1 & 2
AWR PROJECT
Project Accomplishments (cont')

- Received Final Designs
  - Radon Control System, June/August 2000
  - Balance of Plant, September 2000
- Received EPA comments on Remedial Design Package, August 2000

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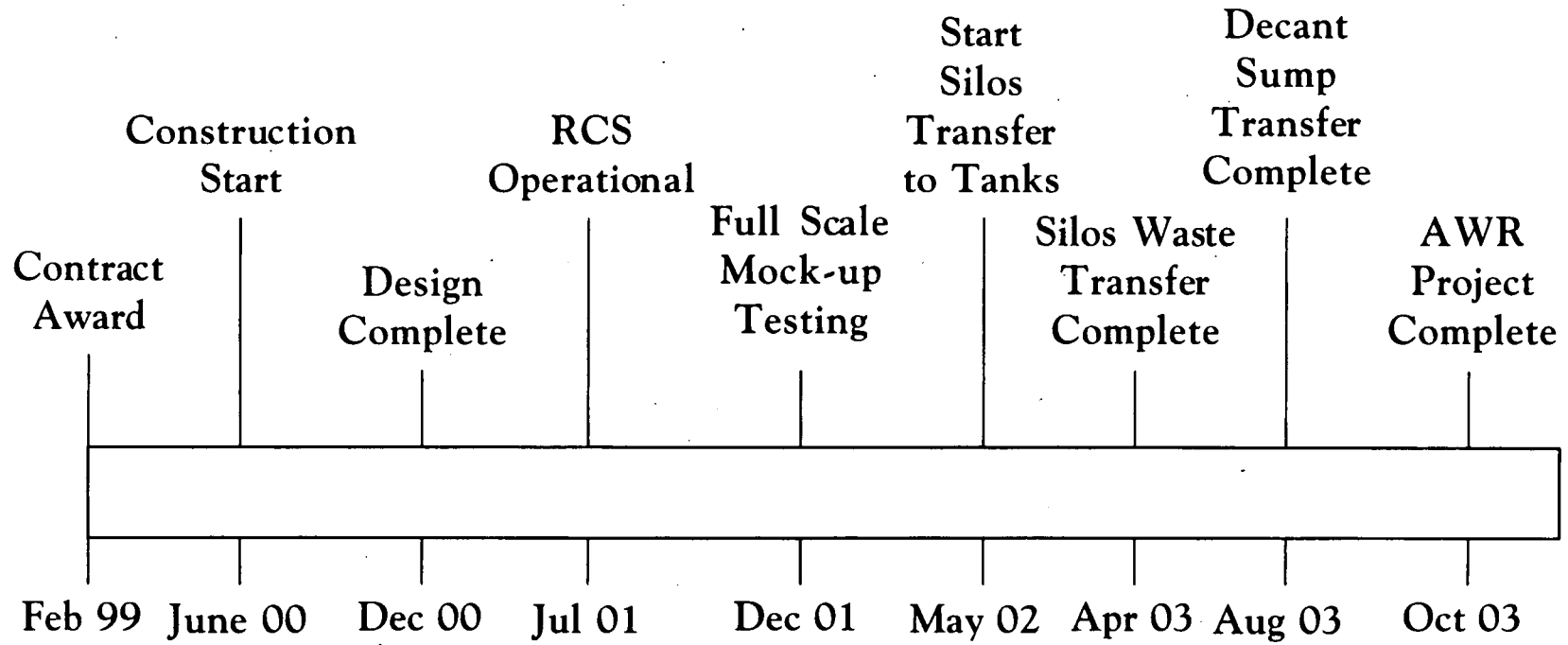
SILOS PROJECT
SILOS 1 & 2
AWR PROJECT
Project Timeline



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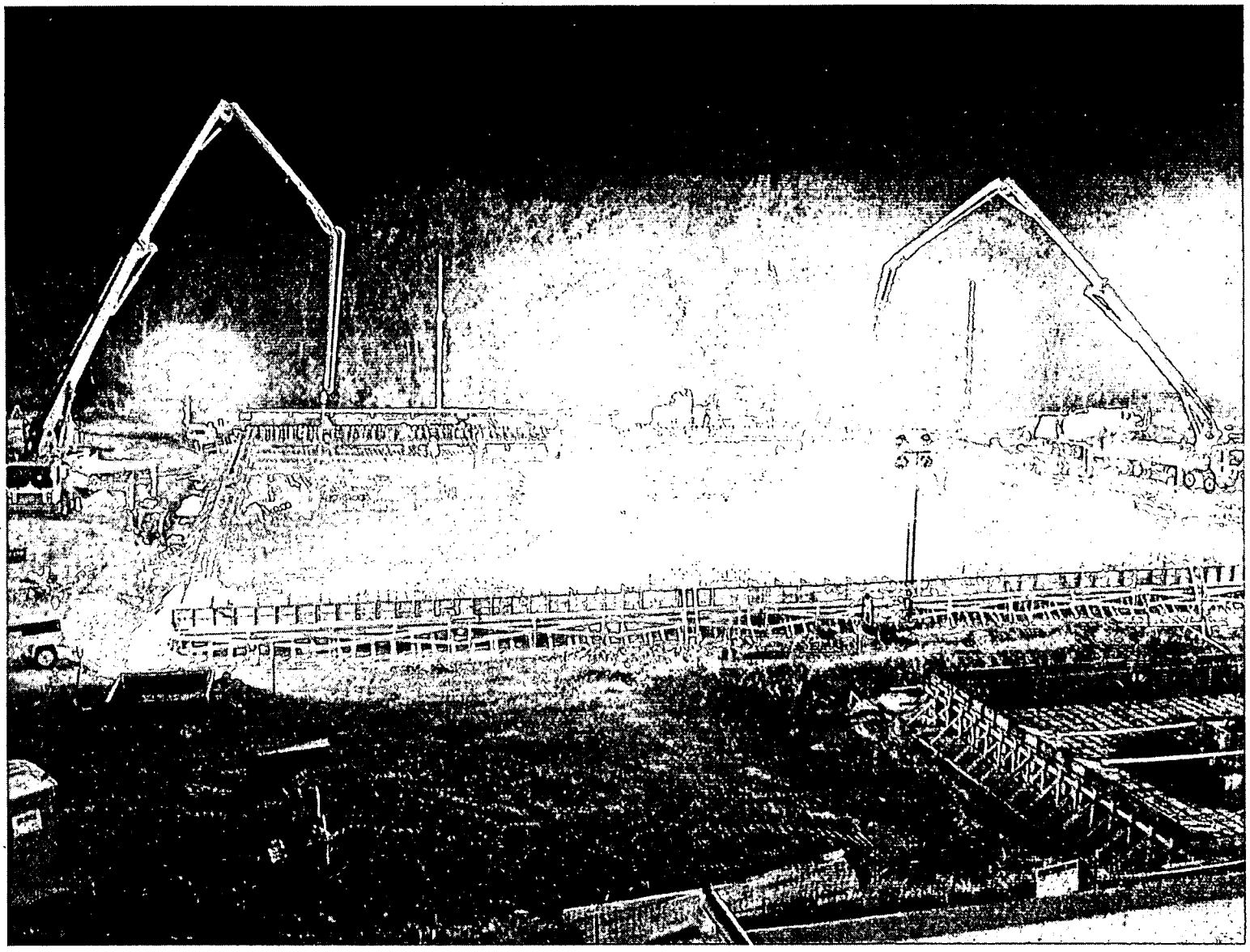
TRANSFER TANK AREA



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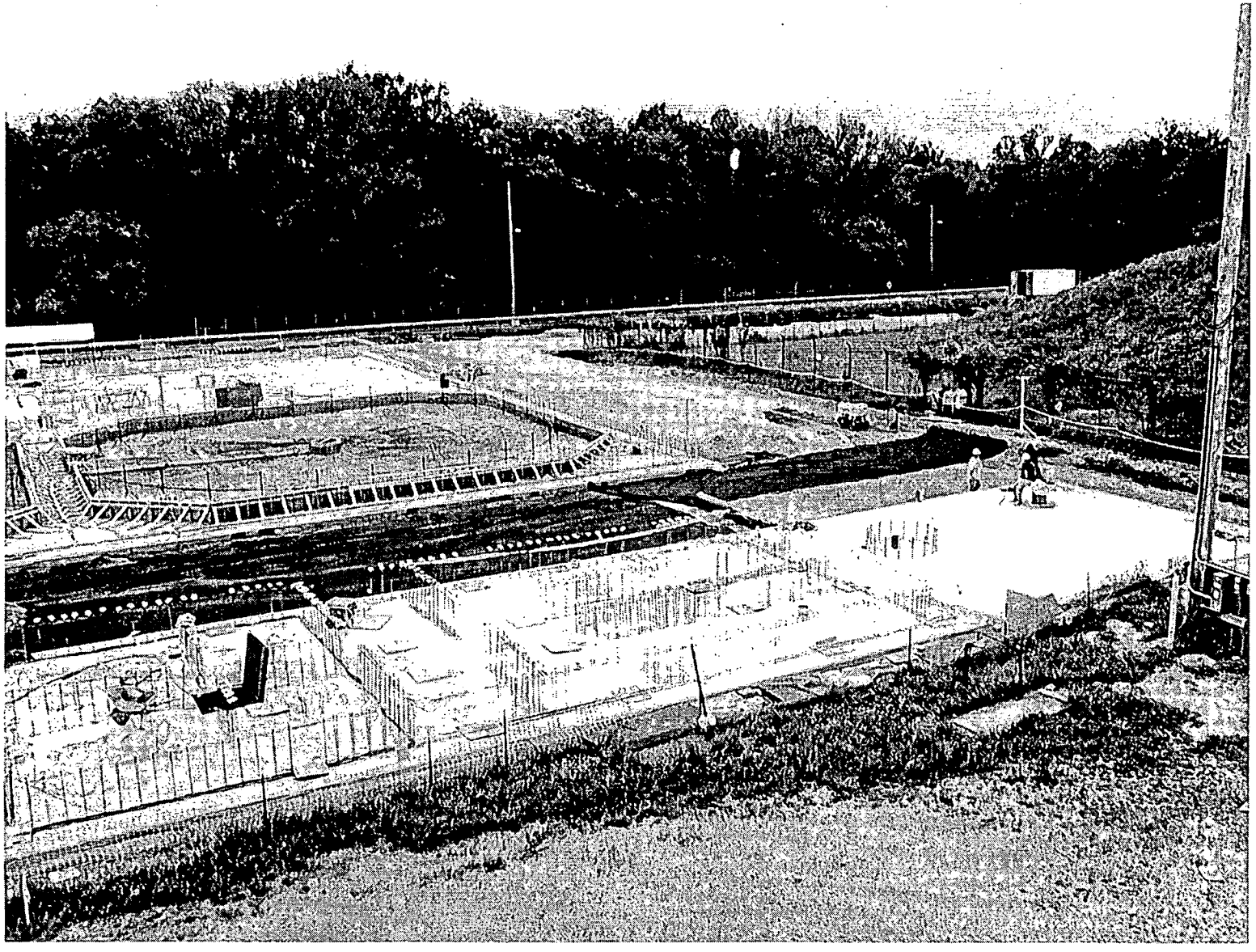
AIR HANDLING/RADON CONTROL SYSTEM FOUNDATION



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RADON CONTROL SYSTEM FOUNDATION

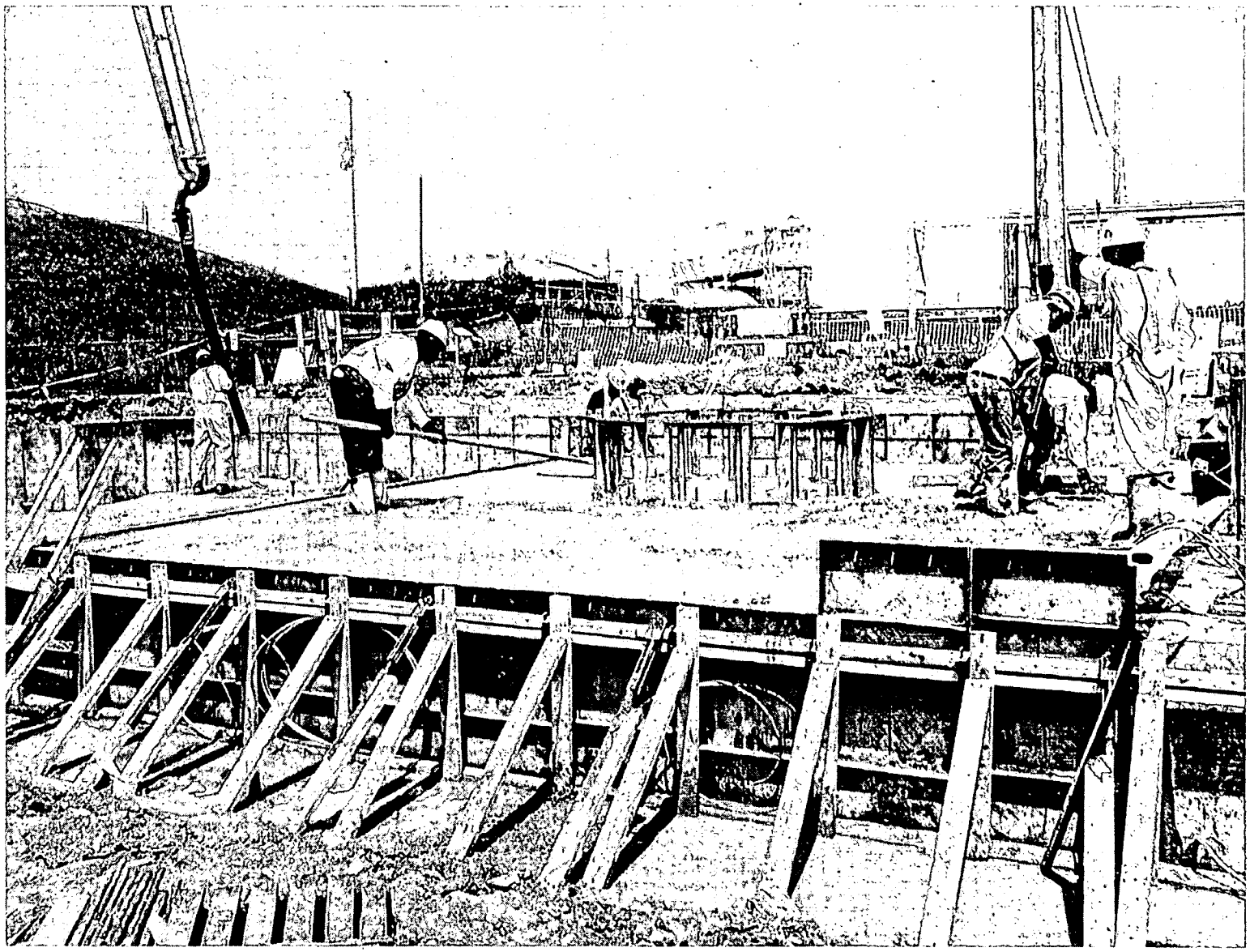


Photo taken August 2000

Graphics # 6627.1J 10/00 Photo # 7385-D191

Foster Wheeler

Accelerated Waste Retrieval Project

Presented by

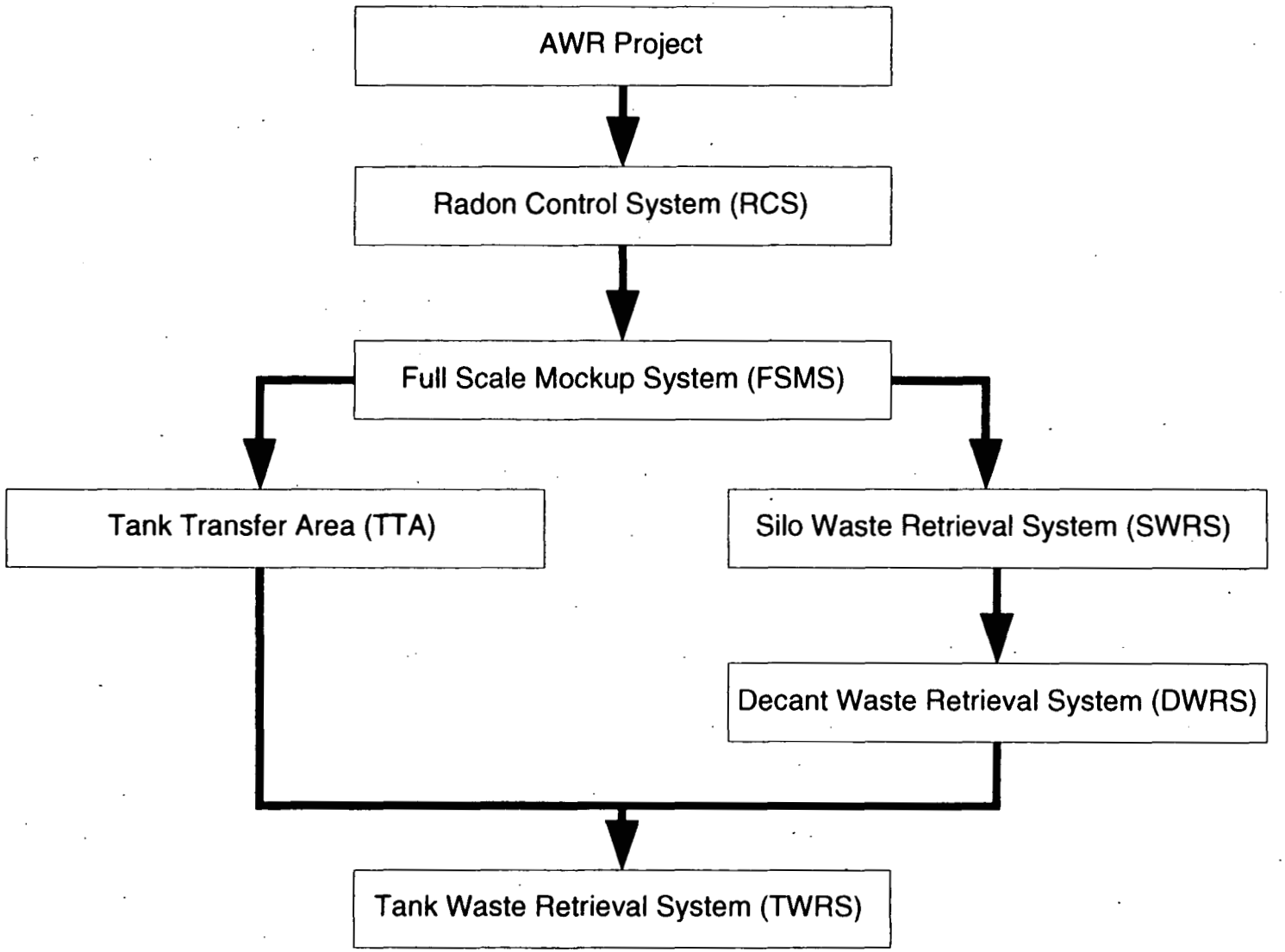
John Lawson

Engineering Manager

Component Definitions

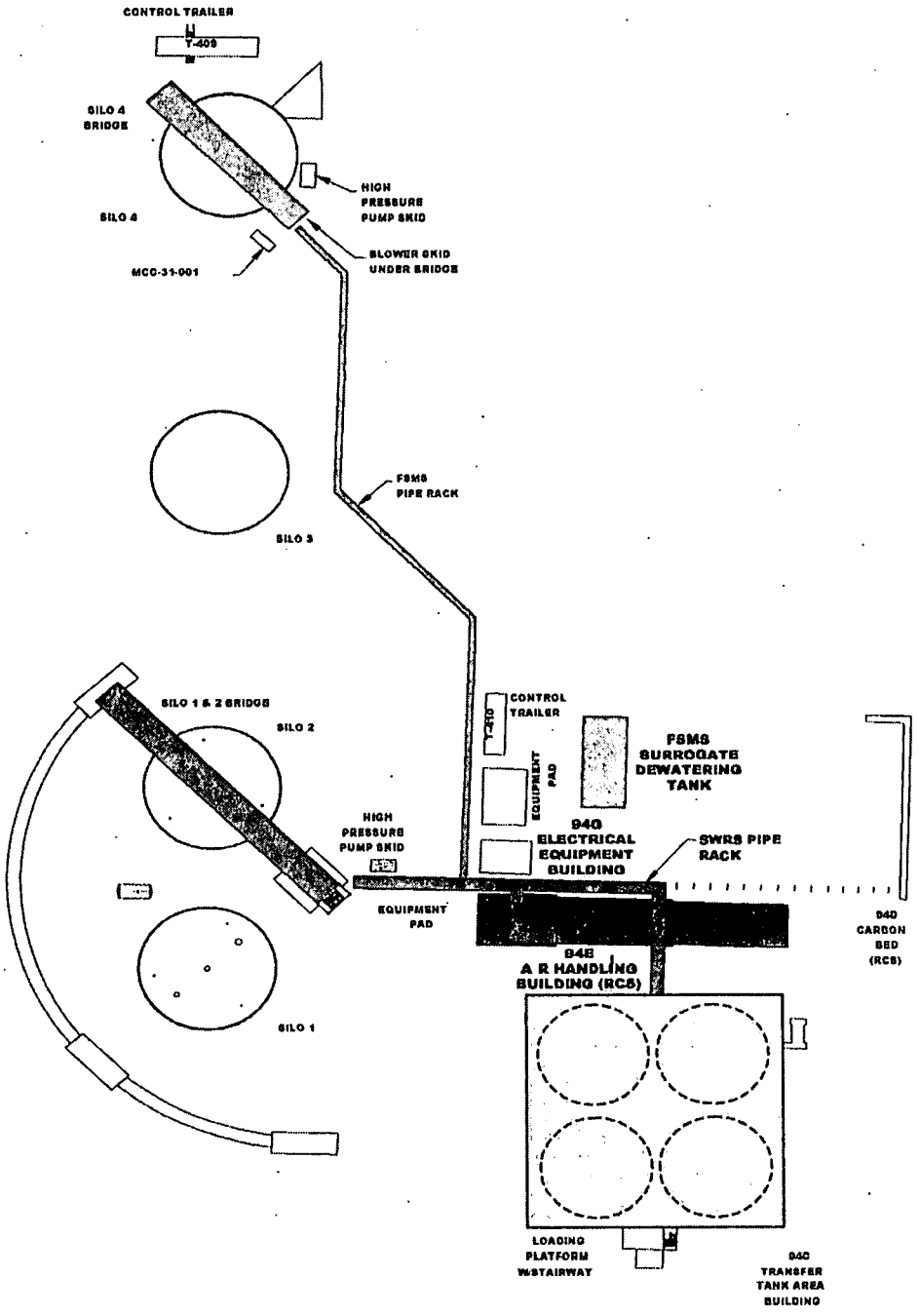
- **AWR** Accelerated Waste Retrieval
- **RCS** Radon Control System
- **FSMS** Full-Scale Mockup System
- **TTA** Tank Transfer Area
- **SWRS** Silo Waste Retrieval System
- **DWRS** Silo Waste Retrieval System
- **TWRS** Transfer Waste Retrieval System

Sequence of Activities



Silos 1 and 2 Accelerated Waste Retrieval Project

Site Layout

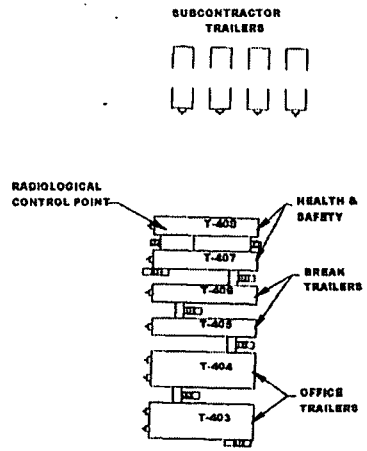


FSMS

TTA

SWRS

RCS



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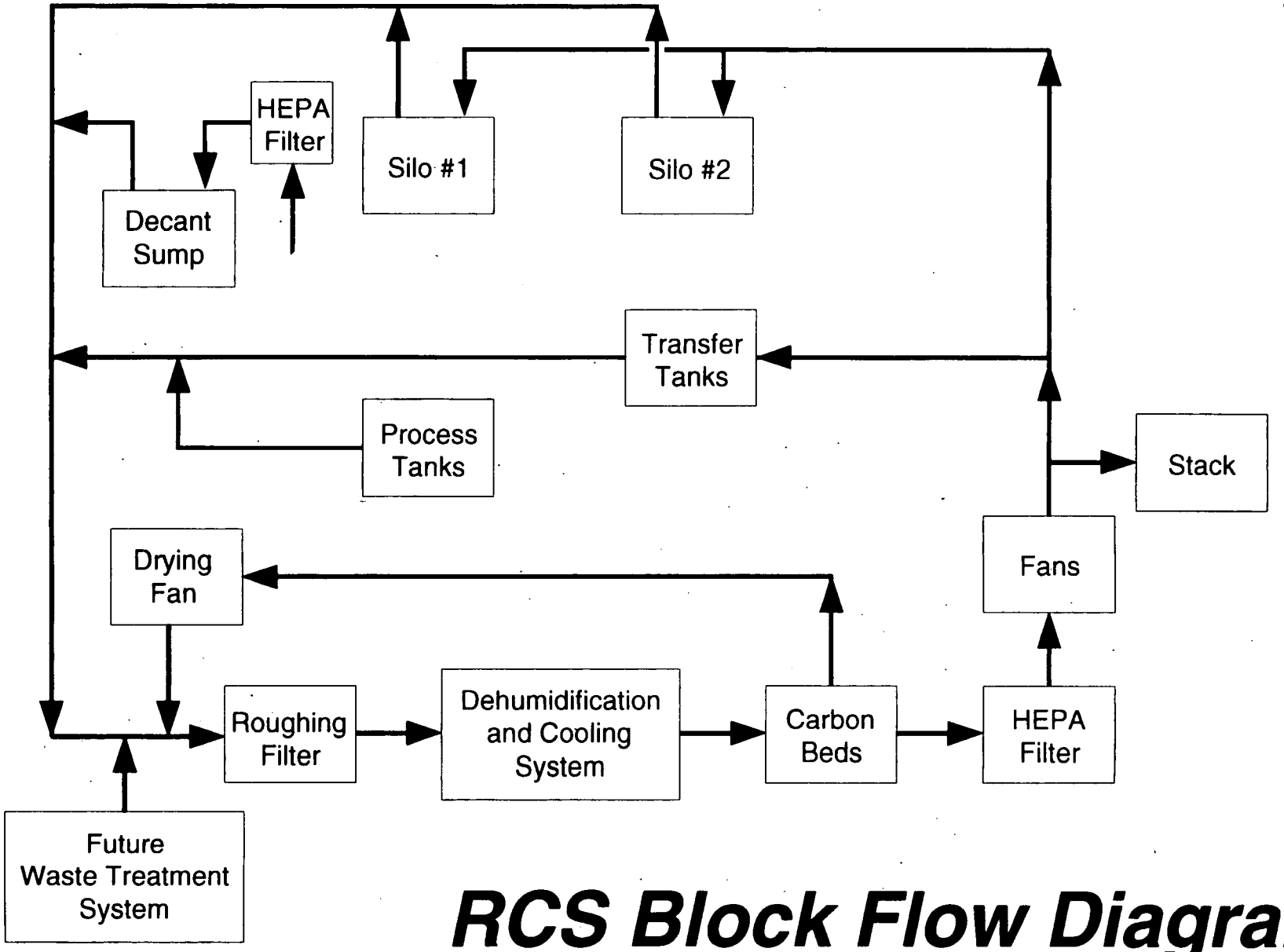
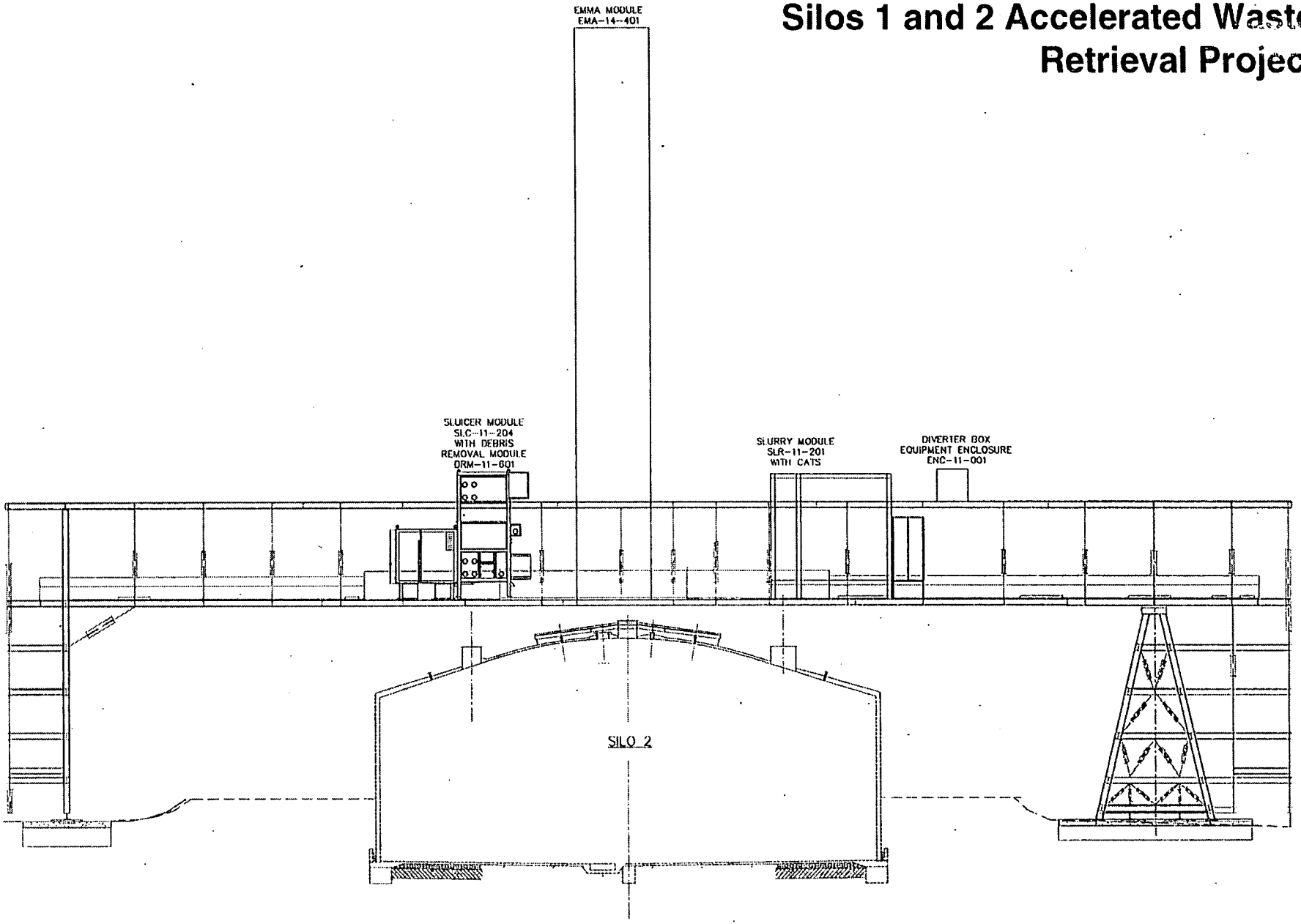
FOSTER WHEELER ENVIRONMENTAL CORPORATION

Silos 1 and 2 Accelerated Waste Retrieval Project



RCS Block Flow Diagram

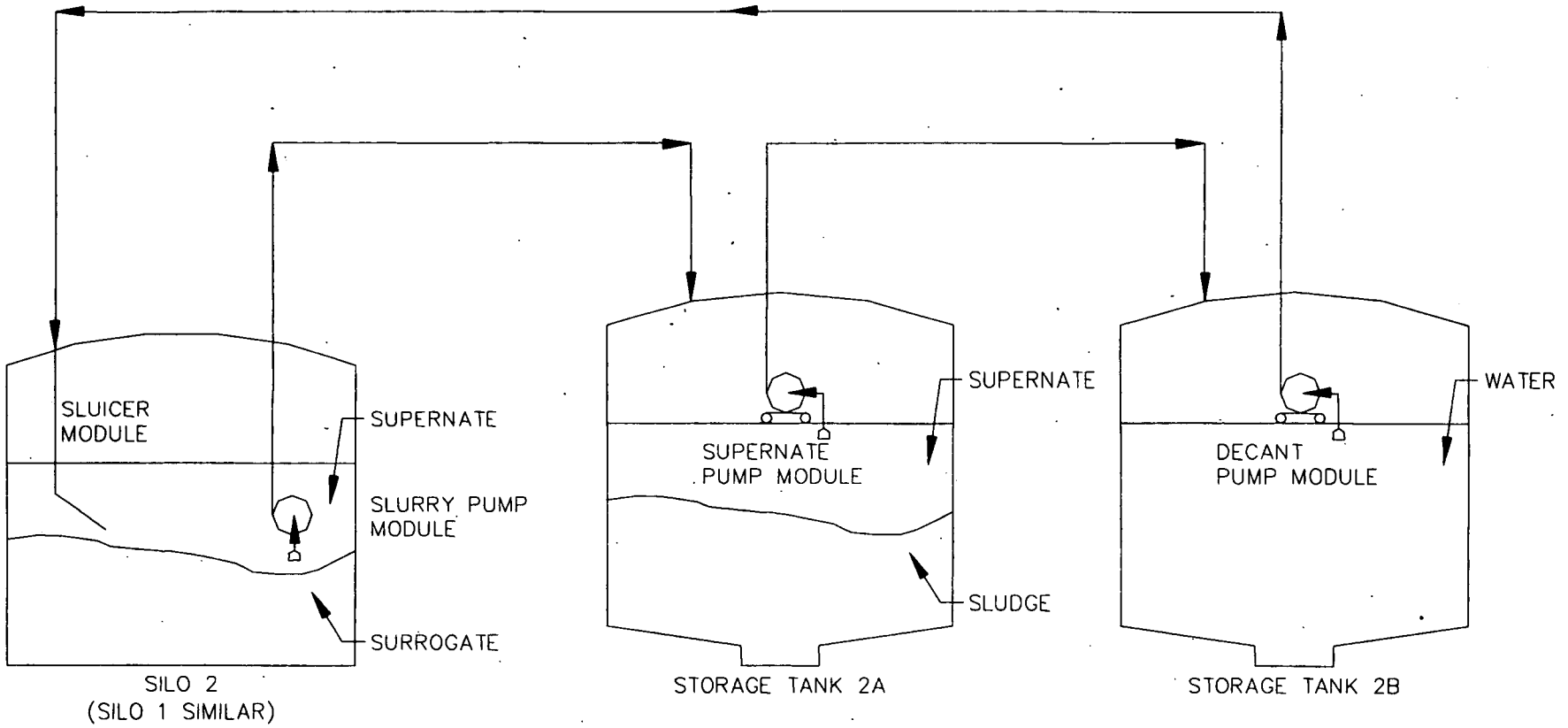
Silos 1 and 2 Accelerated Waste Retrieval Project



Silos 1 and 2 Bridge

FOSTER WHEELER ENVIRONMENTAL CORPORATION

Silos 1 and 2 Accelerated Waste Retrieval Project



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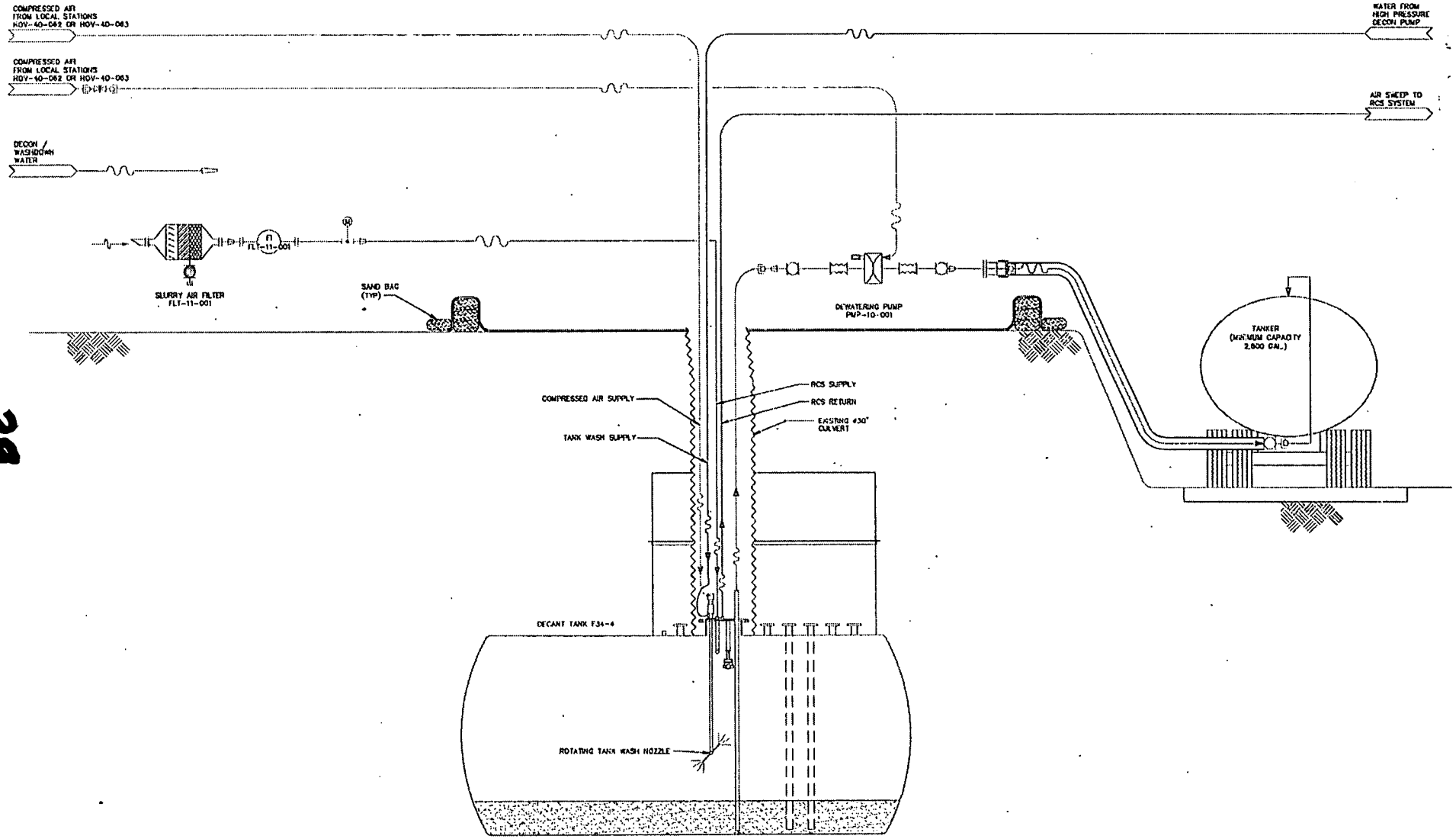
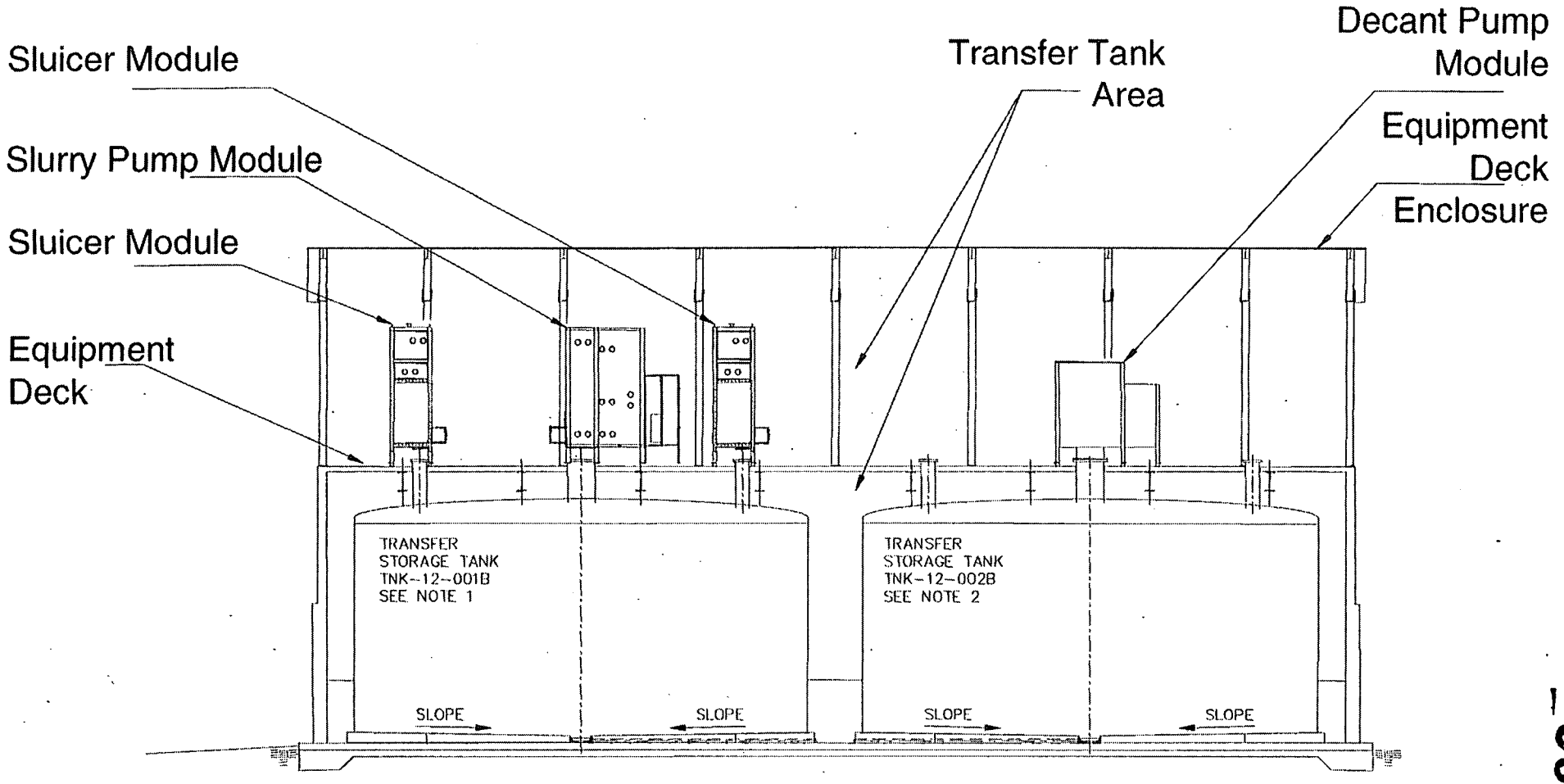


Decant Sump Retrieval System

FOSTER WHEELER ENVIRONMENTAL CORPORATION

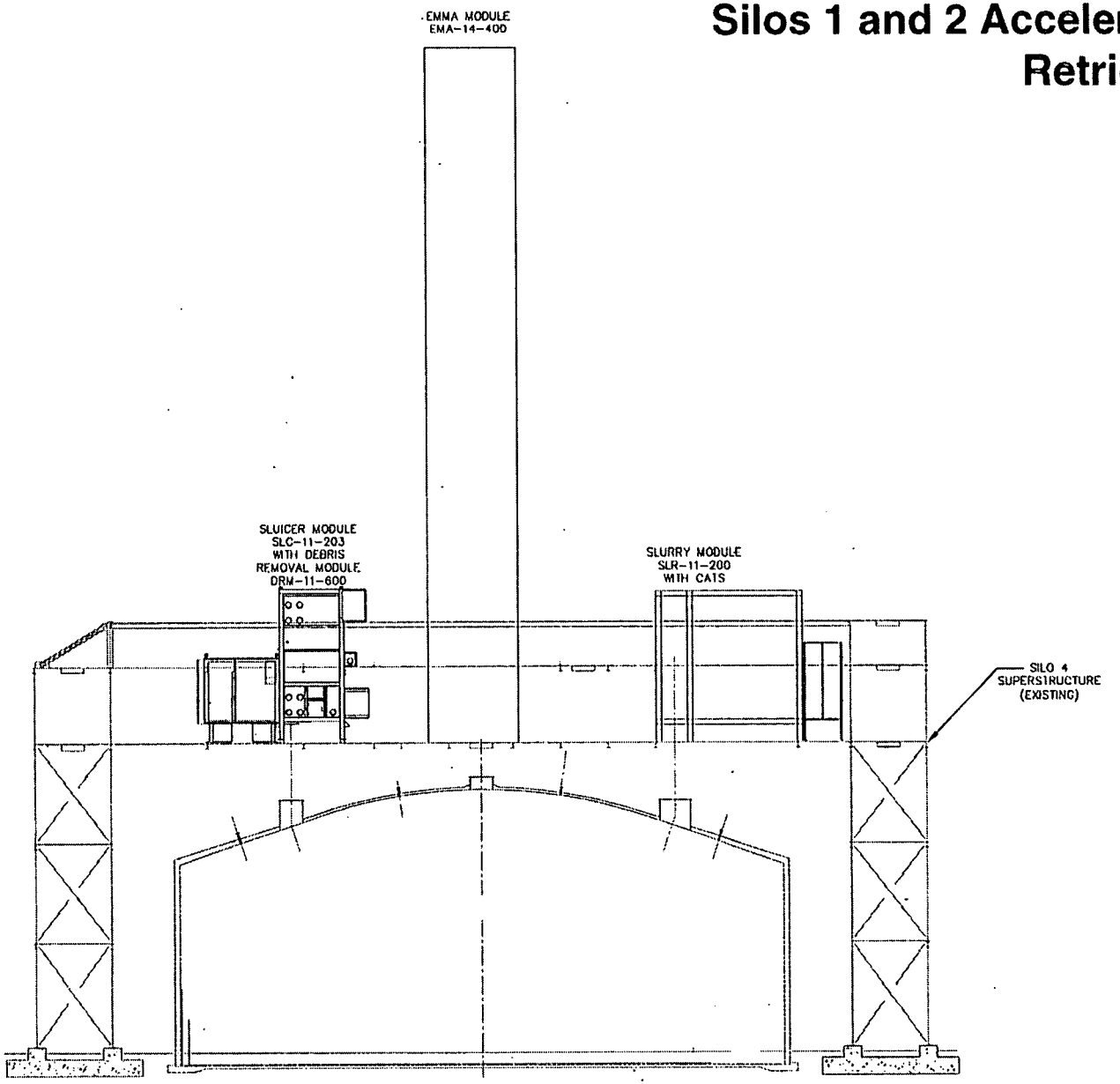
Silos 1 and 2 Accelerated Waste Retrieval Project



Section of TTA Facility

FOSTER WHEELER ENVIRONMENTAL CORPORATION

Silos 1 and 2 Accelerated Waste Retrieval Project



Silo 4 Bridge

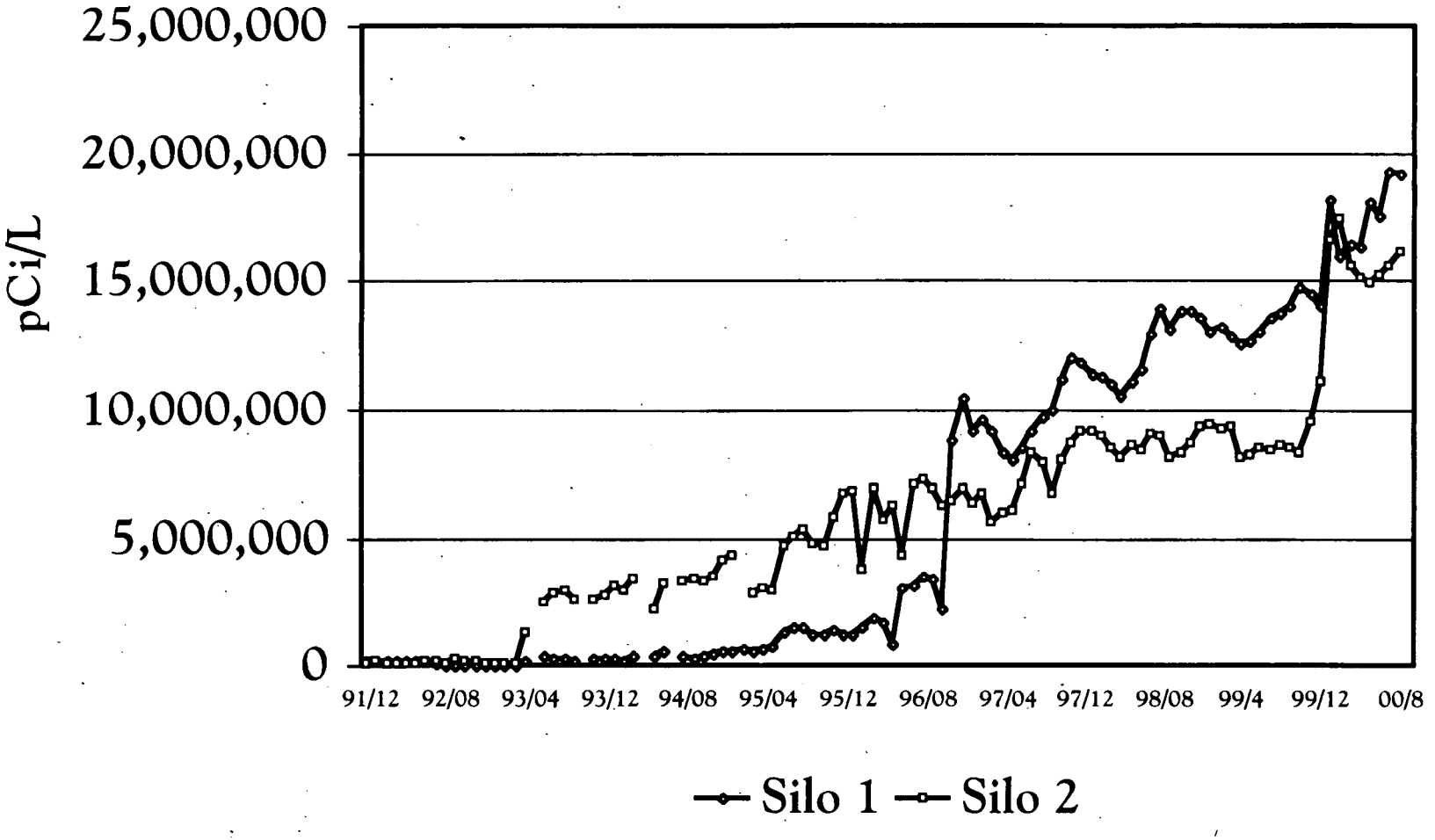
FOSTER WHEELER ENVIRONMENTAL CORPORATION

TWRS

- During TWRS the K-65 material will be transferred from the TTA tanks to the final Remediation Facility
- Operation very similar to SWRS; two sluicers and a slurry pump
- TTA tanks are sloped to middle to allow complete removal of material with direct sluicing operation. No CATS operation required.

SILOS PROJECT
RADON MONITORING

Silo Headspace Radon Concentrations



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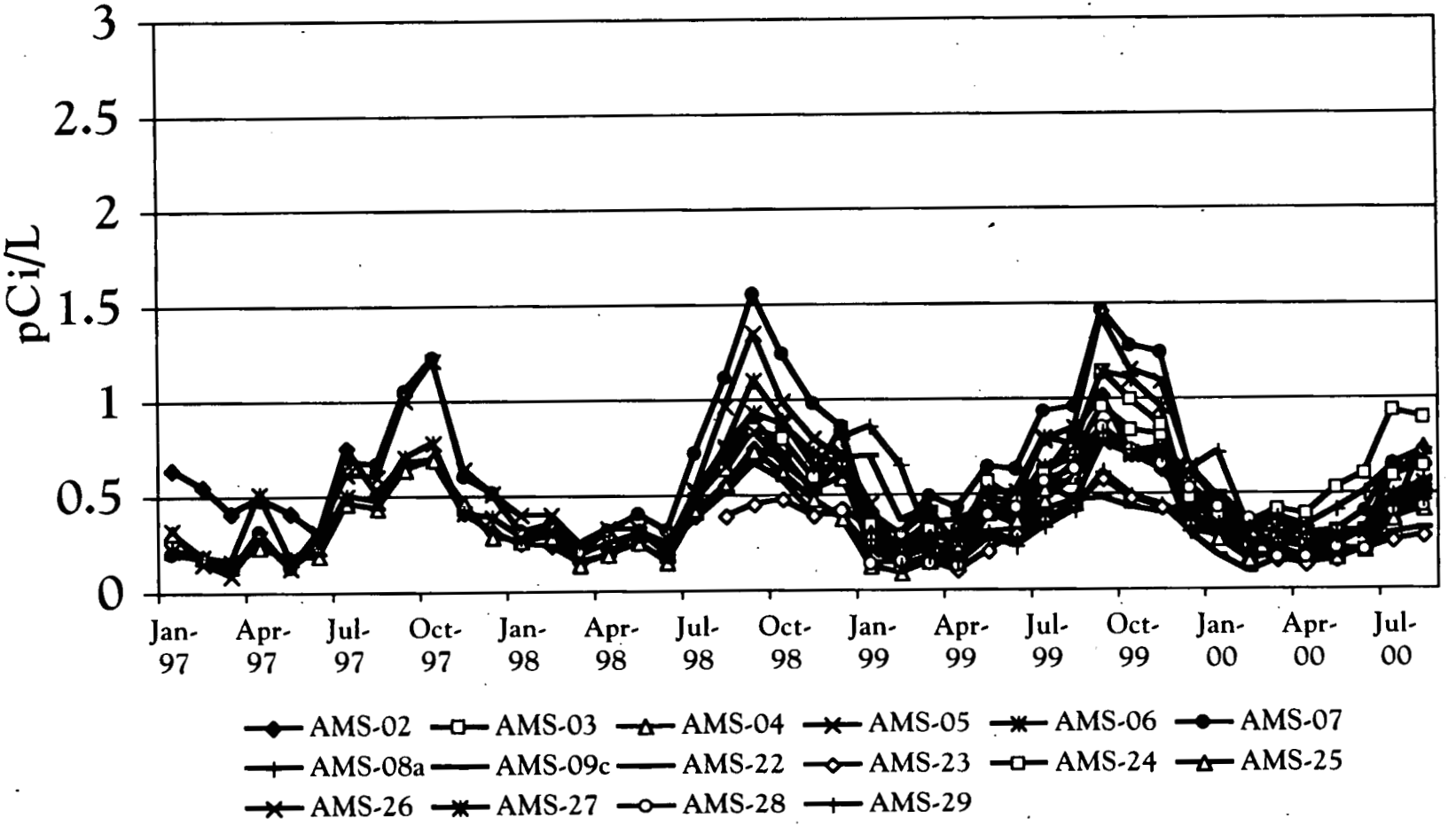
SILOS PROJECT
RADON MONITORING

1997 to 2000 Fenceline Continuous Radon Monitor Results



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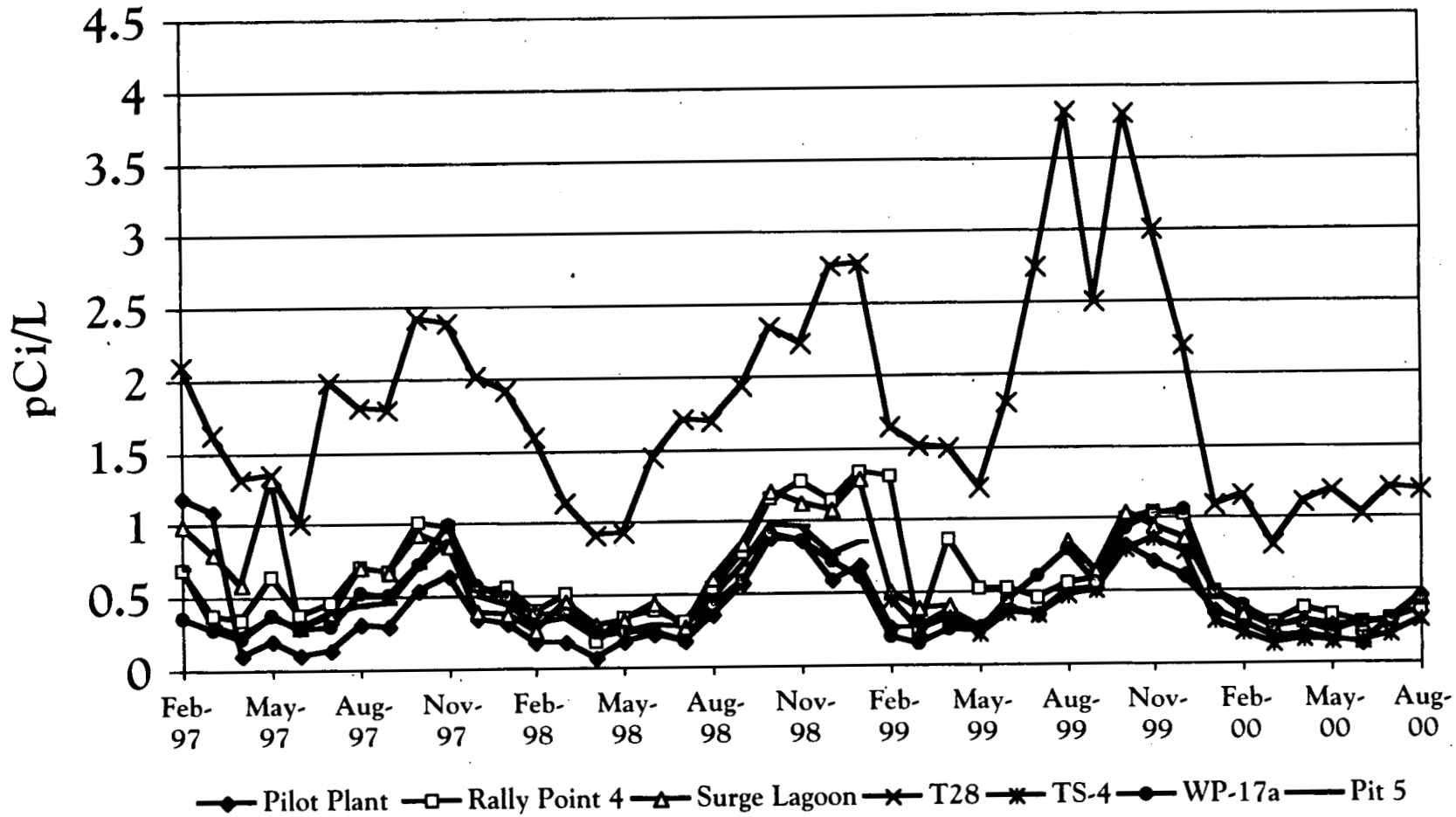
SILOS PROJECT
RADON MONITORING

1997 to 2000 On-site Continuous Radon Monitor Results



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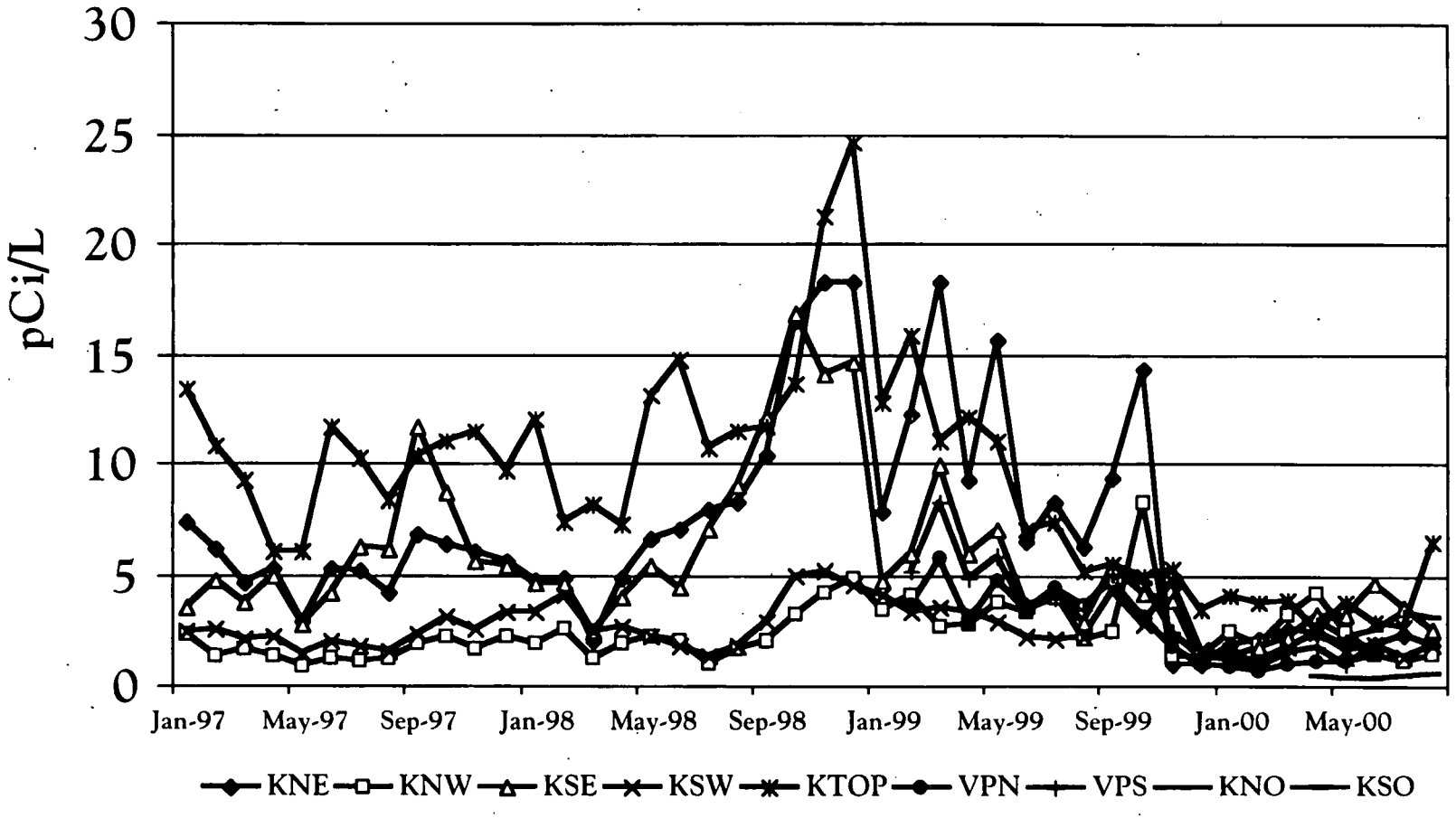
SILOS PROJECT
RADON MONITORING

1997 to 2000 Continuous Radon Monitor Results at Exclusion Zone



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SILOS PROJECT
RADON MONITORING
Upgrades to Boundary Monitoring System

- Relocation of three on-site monitors
- Addition of five new monitoring locations
  - Four on-site
  - One site fenceline

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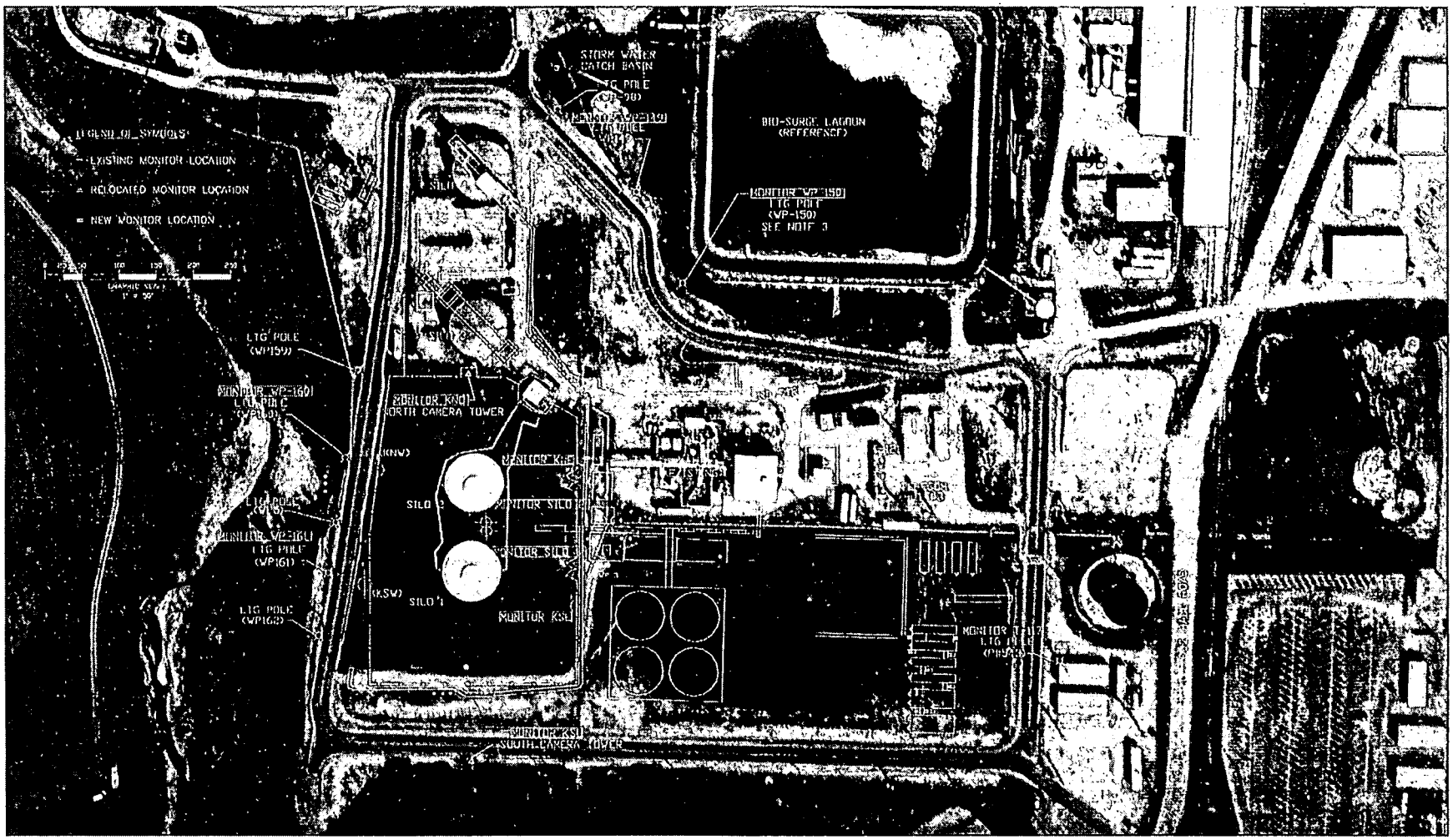
Graphics # 6627.3D 10/00

SILOS AREA RADON MONITORS



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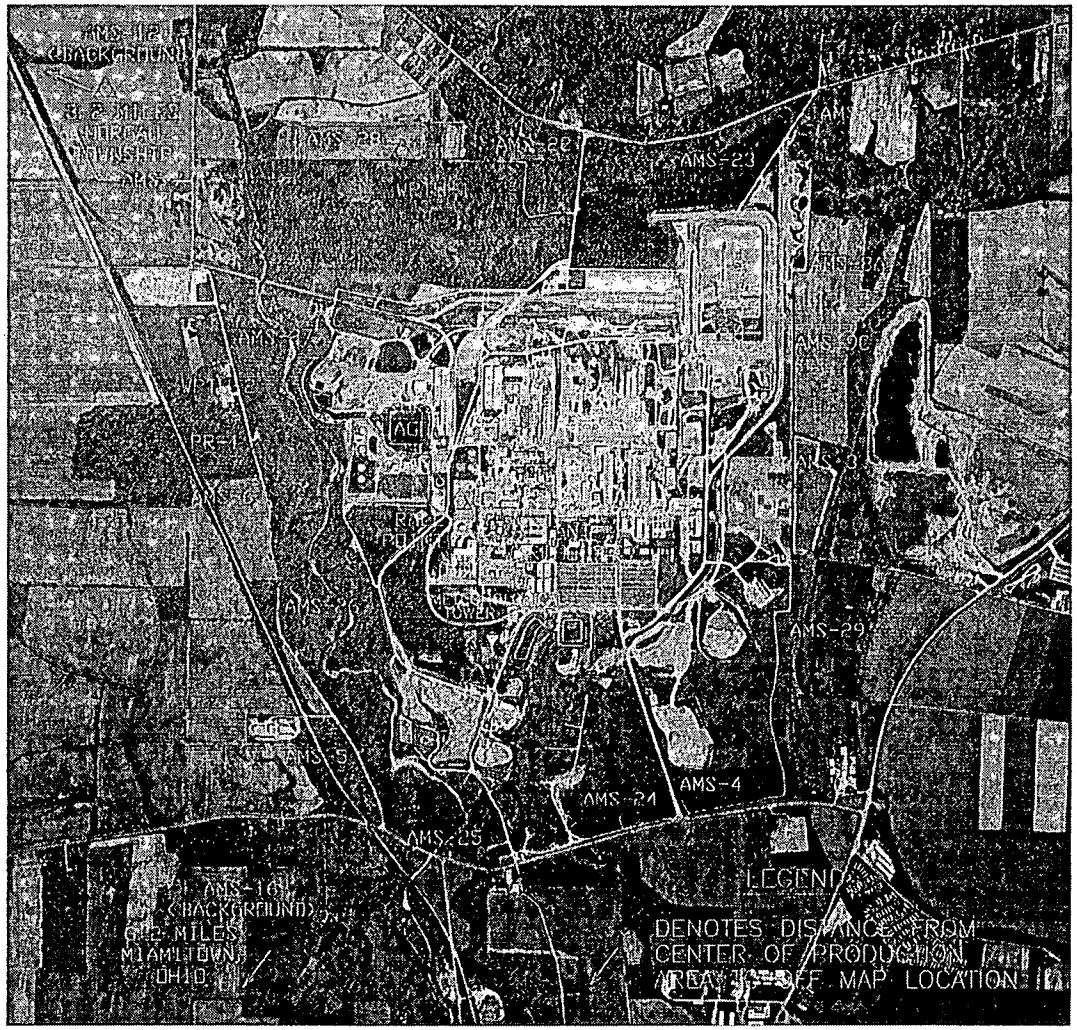
SITE BOUNDARY RADON MONITORING



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SILOS PROJECT
RADON MONITORING

Placement of Radon Monitoring Equipment

- Move west exclusion zone monitors across the road
  - Clear of heavy equipment
  - Better coverage of silo release with wind out of the east
- Move T-28 monitor northeast to light pole 3
  - Clear of Silo 3 Construction activities
- Add radon monitors to the south and north
  - Enhances coverage for potential silo releases

SILOS PROJECT
RADON MONITORING

Placement of Radon Monitoring Equipment

- Add monitor north-northeast at light pole 2
  - Additional coverage between Waste Pits and Silos Projects
- Add monitor at light pole 543 (east)
  - Additional coverage for occupied trailer complex
- Add radon monitor at WPTH-2 location (complete)
  - Better coverage of silo release impact to the west
  - Co-located with particulate monitoring

SILOS PROJECT
RADON MONITORING
Enhanced Access to Real-Time Radon Data

- Access to real-time radon data
  - Twelve monitoring locations available
    - Four Exclusion Zone
    - Two Headspace
    - One Rally Point 4
    - Five Fenceline Monitors (AMS-2, 4, 5, 6 and 7)

SILOS PROJECT
RADON MONITORING
Enhanced Access to Real-Time Radon Data

- Evaluate expansion of monitor networking
  - Enhanced EPA access to monitoring data
  - Enhanced response capability in the event of an upset condition.

Graphics # 6627.3H 10/00

SILOS PROJECT
RADON MONITORING

Evaluate Current Particulate Analyses for Silo IOCs

- Evaluate current sampling and analysis program and adjust as necessary for Silo materials
  - Ra-226
  - Th-230
  - Total Particulate
- Four additional particulate monitors:
  - Bio-Surge Lagoon
  - LP-2
  - T-117
  - LP-15

RADON MONITORING

Photo taken October 2000

Graphics # 6627.3J 10/00 Photo # 7385-D308

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PEIC MONITORING DATA

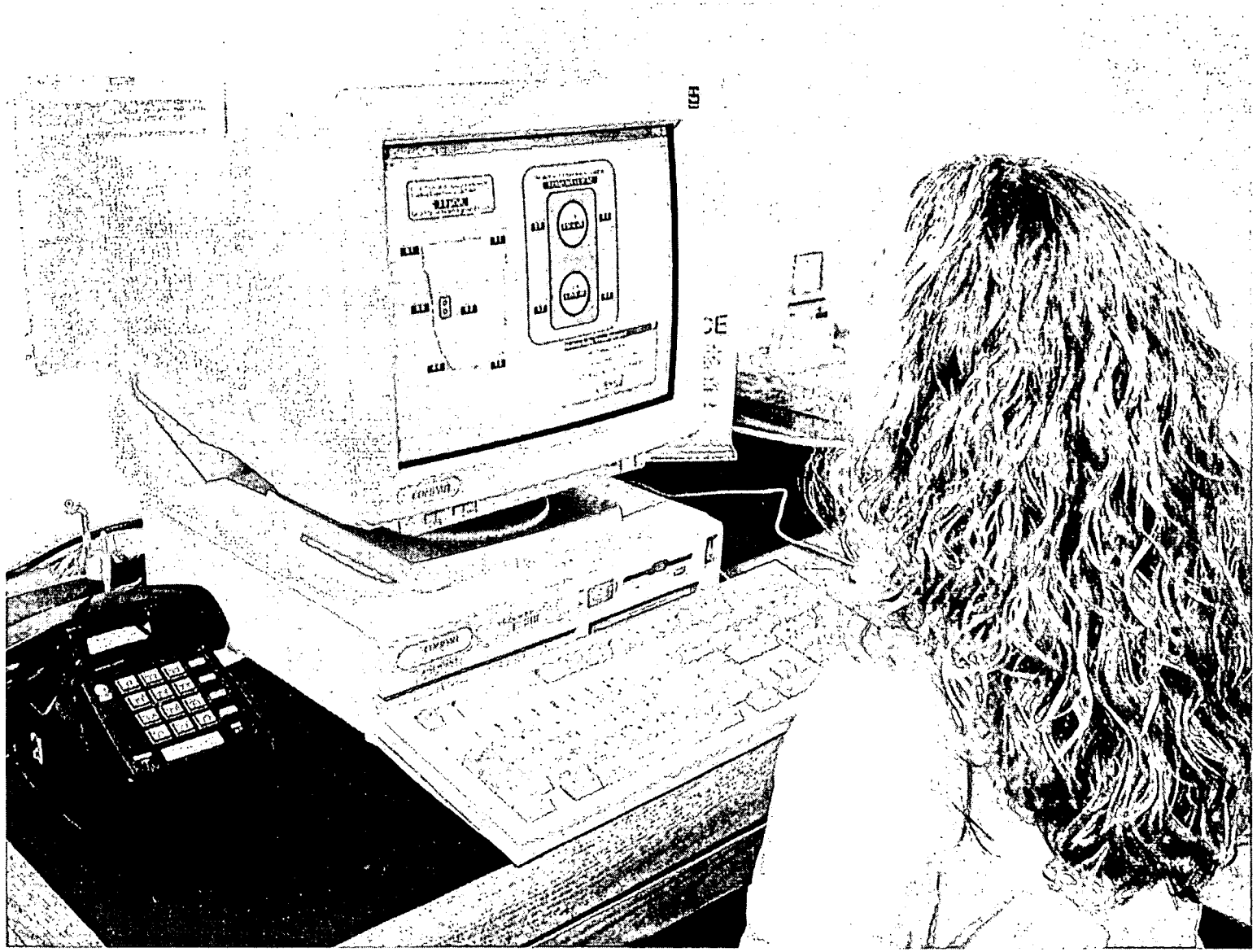

Photo taken July 1999

Graphics # 6627.3K 10/00 Photo # 7174-D9